CITY OF SANTA BARBARA
COMMUNITY DEVELOPMENT DEPARTMENT
DRAFT MITIGATED NEGATIVE DECLARATION – MST2011-00315

Pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970," as amended to date, this Draft Mitigated Negative Declaration has been prepared for the following project:

PROJECT LOCATION: **1400 – 1700 Block East Cabrillo Boulevard and 1414 Park Place, Santa Barbara, CA**

PROJECT PROPONENT: **Parks and Recreation Department, City of Santa Barbara, 620 Laguna Street, Santa Barbara, CA 93101**

PROJECT DESCRIPTION: The project would remove 0.86 acres of marsh vegetation from Andree Clark Bird Refuge and restore 0.86 acres of wetland habitat at the Refuge, and remove silt and vegetation from a grouted sandstone culvert along Old Coast Highway and from a concrete culvert entering the Bird Refuge from the north, for a total of 0.07 acres from the culverts. Maintenance activities would occur over a five-year period to keep the affected locations free of marsh vegetation. The purpose of the project is to restore water flow and conveyance in the lake and culverts to reduce mosquito production and flooding, improve water quality and limit eutrophication and resulting odors. The proposal would also protect the diversity of habitats at the Bird Refuge.

IDENTIFIED MITIGATION: Environmental effects identified as potentially significant in the Draft Mitigated Negative Declaration include impacts related to **biological resources, cultural resources, noise, public services and water environment**. The Draft Mitigated Negative Declaration includes proposed mitigation measures to mitigate potentially significant impacts to a less than significant level. Mitigation measures to further reduce adverse but less than significant impacts related to **air quality, hazards and transportation** have also been identified in the Draft Mitigated Negative Declaration.

MITIGATED NEGATIVE DECLARATION FINDING:

Based on the attached Initial Study prepared for the proposed project, it has been determined that the proposed project will not have a significant effect on the environment.

Environmental Analyst

Date 8/29/11

CITY OF SANTA BARBARA
COMMUNITY DEVELOPMENT DEPARTMENT, PLANNING DIVISION

INITIAL STUDY/ ENVIRONMENTAL CHECKLIST MST2011-00000315

PROJECT: ANDREE CLARK BIRD REFUGE VEGETATION MAINTENANCE AND HABITAT RESTORATION

August 29, 2011

This Initial Study has been completed for the project described below because the project is subject to review under the California Environmental Quality Act (CEQA) and was determined not to be exempt from the requirement for the preparation of an environmental document. The information, analysis and conclusions contained in this Initial Study are the basis for deciding whether a Negative Declaration (ND) is to be prepared or if preparation of an Environmental Impact Report (EIR) is required to further analyze impacts. Additionally, if preparation of an EIR is required, the Initial Study is used to focus the EIR on the effects determined to be potentially significant.

APPLICANT/ PROPERTY OWNER

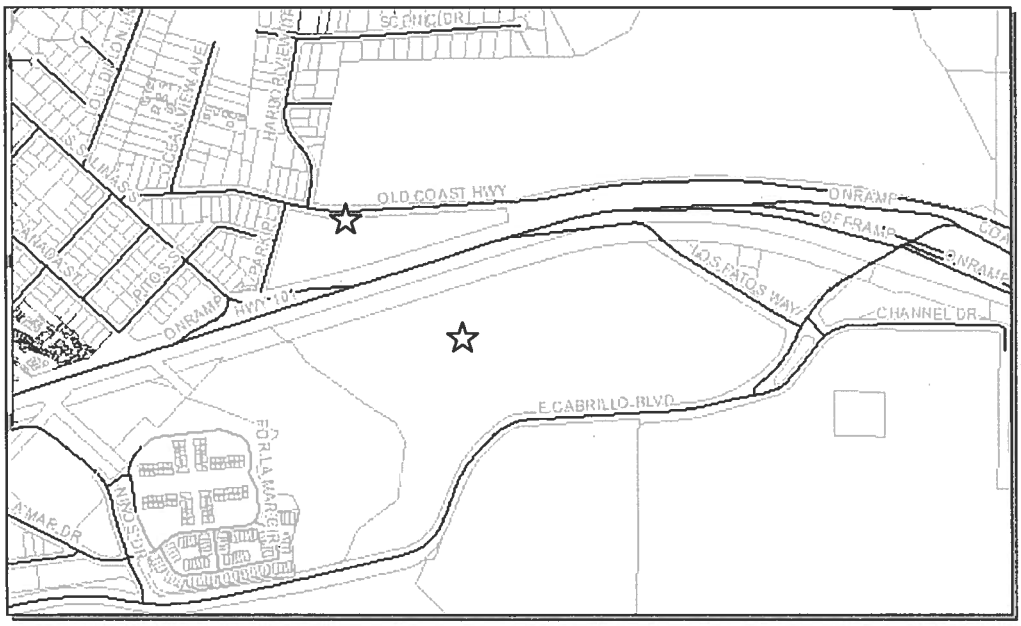
Applicant: Jill Zachary, Assistant Parks and Recreation Department Director, City of Santa Barbara

Applicant Representatives: Kathy Frye, Natural Areas Planner, Parks and Recreation Department, City of Santa Barbara

Owner: City of Santa Barbara

PROJECT ADDRESS/LOCATION

1400-1700 Blocks of East Cabrillo Boulevard (Andree Clark Bird Refuge); 1414 Park Place (sandstone culvert). Access to the Bird Refuge is from East Cabrillo Boulevard and Los Patos Way, in the southeast corner of the City in the East Beach neighborhood. See Exhibit A.



PROJECT DESCRIPTION (See *Exhibit B-Project Plans*)

The project consists of initial and follow-up routine maintenance to remove 0.86 acres of marsh vegetation from the Andree Clark Bird Refuge (Bird Refuge) lake and restoration of 0.86 acres of wetland habitat. The project would also include the removal of silt and vegetation from a grouted sandstone culvert along Old Coast Highway and from a concrete channel at the Bird Refuge, for a total of 0.07 acres from hardscaped culvert and channel. Initial maintenance activities are proposed for year one and follow-up maintenance, proposed for years two through five of the five-year period would keep those same locations free of marsh vegetation

The City of Santa Barbara Parks and Recreation Department (Department) manages the Andree Clark Bird Refuge, a 42-acre open space park that includes a 29-acre lake that is an artificially modified estuary that supports brackish wetlands.

Three islands are located in the lake. Sediment has settled in the lake and within culverts and supports dense marsh vegetation, known as a breeding ground for mosquitoes carrying West Nile virus and other diseases.

The purpose of the Andree Clark Bird Refuge Vegetation Maintenance and Habitat Restoration Project is to restore water flow and conveyance in the lake and culverts for the purpose of reducing mosquito production and flooding. Santa Barbara County Vector Control District personnel have expressed concerns regarding limited lake access for mosquito control. The Parks and Recreation Department has concerns regarding the loss of conveyance in culverts and the potential for flooding in the vicinity, including Cabrillo Boulevard and Old Coast Highway. In addition, improved conveyance will improve water quality and reduce the potential for lake eutrophication.

In addition to regular annual maintenance in the past five years (vector testing, trail maintenance, removal of floating vegetation, etc.), the Parks Department has applied for and received two emergency permits for vegetation removal: one in the summer of 2006 to facilitate vector control due to unusually high mosquito counts; and, the other after the 2008 Tea Fire to help restore flow in anticipation of winter rains. Permitting agencies have recommended submittal of the subject five-year permit application to avoid emergency or repeated maintenance permits in the future.

Project Components: Through implementation of the proposed project, the Department will:

- Remove approximately 0.93 acres of emergent vegetation, including 0.86 acres from the Bird Refuge lake and 0.07 acres from man-made culverts, and maintain those areas, as needed, during the five-year maintenance period;
- Remove floating emergent vegetation as it senesces or dislodges from rooted locations; and
- Perform 0.86 acres of wetland and wildlife habitat restoration, or equivalent (1:1) acreage, based on project impacts to wetland vegetation, except in man-made hard-bottomed culverts.

Proposed Removal of Aquatic Vegetation: A contractor, under the direction of the City, will perform the cut, harvest and removal of emergent marsh vegetation, including their rhizomes and roots. Due to unknown lake depths, it is uncertain whether the contractor will be able to access and remove all acreage identified. The Andree Clark Bird Refuge project area map provided in Exhibit B illustrates existing Bird Refuge vegetation (SAIC 2008) with an overlay of areas proposed for removal. The project area along Old Coast Highway and an expanded view of the Bird Refuge culvert are provided in Exhibit C. Removal areas in and associated with the Bird Refuge are included in Table 1.

TABLE 1. IMPACT AREA AND ACREAGE

Area	Area Description	Area Acres
A	Viewing platforms A1, A2 and A3	0.10
B1	Grouted sandstone box culvert along Old Coast Highway	0.03
B2	Concrete-lined channel extending into Bird Refuge	0.04
C	Between western island and northern shore	0.56
D	Southeast corner	0.10
E	Scattered along perimeter – estimated	0.10
	TOTAL	**0.93**

Area A. Removal of vegetation around three viewing platforms, A1, A2, and A3 in Exhibit B, will provide water circulation in the vicinity of the platforms and open visibility for bird and wildlife viewing. An aquatic reed cutter and harvester would be used to complete 1,200 square feet of emergent vegetation removal around each of the three platforms, for a total of 0.1 acres. The aquatic construction equipment is discussed in more detail below. The far western platform (A1) is completely enclosed by aquatic vegetation and removal of additional vegetation is addressed in Area C.

Area B. An open box culvert (B1), located upstream from the Bird Refuge between the Municipal tennis courts and Old Coast Highway, conveys Old Coast Highway run-off to reinforced concrete pipes beneath Highway 101 and the railroad trestle, and empties into a concrete-lined channel (B2) at the northern end of the Bird Refuge.

B1. The open box culvert is constructed of sandstone boulders and cobbles grouted with concrete and measures 5 feet wide by 400 feet in length. Sediment has settled and emergent vegetation has rooted within ¾ of the culvert. A total of 0.03 acres or 123 cubic yards of emergent vegetation, sediment and trash will be removed from the box culvert.

B2. The concrete-lined channel extends into the Bird Refuge approximately 130 feet south of the trestle (Exhibit B).The channel measures 15 feet wide by 70 feet in length from the trestle to the foot bridge and measures 10

feet wide by 60 feet in length from the bridge to the terminus of the channel. Sediment has settled and emergent vegetation rooted within the 330 cubic yards of sediment (0.04 acres) will be removed from the channel.

Work will be completed by backhoe or bucket from the adjacent upland during year one. Regular maintenance will be performed within the box culvert and channel on an annual or biennial (every two years) basis, as needed to keep these storm drain structures free of vegetation and silt.

Area C. At one time, the western island was completely isolated from the northern shore of the Bird Refuge. Over time, sediment has built up between the end of the concrete channel (B2) and the island. Emergent wetland vegetation has taken root in this area. This vegetation continues to trap sediment, resulting in a boggy path to the western island. This stand of emergent vegetation can be seen in Exhibit B. The reed cutter and harvester will be used to remove 0.56 acres of emergent wetland vegetation during year one. A border of emergent vegetation around the island and mainland shores would be left in place as wildlife habitat.

Area D. A large stand of emergent vegetation exists at the southeast corner of the Bird Refuge. The reed cutter and harvester would be used to open two to three access points for vector control boats and to increase access for mosquito fish. Equipment would also be used along the edge to remove "floaters" that break away from the edge of the vegetation stand for a total of 0.1 acres of emergent vegetation removal in Area D.

Area E. Boating by the public is not allowed within the Bird Refuge; however, department staff and other personnel launch small boats into the pond for maintenance and vector control. The "beach", a sandy area south of the Bird Refuge parking lot and the pond directly adjacent to the beach are kept clear of terrestrial and emergent vegetation for boat launching. This area is also kept clear for wildlife viewing purposes. Emergent vegetation is removed from the pond adjacent to the beach by wrapping clumps of vegetation with chains or rope and pulling vegetation landward from the shore with a backhoe or truck.

Vegetation Maintenance - Dislodged (Senescent and/or Green) Aquatic Vegetation. Aquatic emergent vegetation breaks away from rooted locations, floats in the Bird Refuge pond and has the potential to clog the weir. Vector control personnel have also identified floating vegetation as a breeding ground for malaria mosquitoes. Vegetation clumps (floaters) are senescent and/or green. Floaters occur especially during winter storms when elevated water levels lift dislodged vegetation from their resting place and circulating water or wind pushes loose vegetation around the lake. Vegetation transported to the weir can obstruct the overflow, which results in flooding along Cabrillo Boulevard. As a preventative measure, staff currently removes floating vegetation with hand equipment from a small boat or pulls it landward from the shore. This practice will continue over the five-year maintenance period, as needed.

Follow up and General Maintenance. There is a potential for emergent vegetation to re-establish in Areas A through D. Follow up maintenance, similar to what has been described, would be performed as needed to keep waterways open. The amount of repeat emergent vegetation removal is not known at this time.

Habitat Restoration: Vegetation management at the Bird Refuge would include wetland and wildlife habitat restoration, enhancement and/or creation. Habitat restoration would be achieved through the removal of non-native vegetation, installation of native plant species and enhancement of wildlife habitat. It is assumed that the project would result in impacts to 0.86 acres of wetland habitat within the lake and 0.86 acres of restoration would be performed, a ratio of 1:1 (1 acre restored for every 1 acre impacted), with the exception of disturbances in man-made culverts (0.07 acres). Culverts are hardscaped storm drain structures never intended as native habitat. If project impacts result in less than the expected acreage, the Department would perform equivalent wetland restoration at a 1:1 acreage ratio. For example, if only 0.50 acres of project impacts to wetland occur, 0.50 acres of wetland restoration would be performed.

Demolition/Construction:

Construction Equipment and Duties. Construction would include an aquatic reed cutter ("cookie cutter"), Aquamog Mechanical Restoration System with powered flail mower and/or rototiller attachments, aquatic harvester, trailer conveyor, transportation trailer and crane, backhoe and/or track hoe and haul trucks. The aquatic cookie cutter, Aquamog and harvester would be offloaded from a transportation trailer via crane. Photographs of the aquatic equipment are provided in Exhibit D. The aquatic reed cutter requires at least 20 inches water depth in order to operate. Blades on the front of the cookie cutter will cut/shred vegetation in sections above and below the water, including the root system. The cookie cutter slices into soil to shred the root system but does not excavate soil. As vegetation is removed, a channel is created for equipment access. The aquatic plant harvester will collect the vegetation debris and transport it to the shore at the "beach". A sloping, relatively compact substrate, such as that found at the "beach" is required for vegetation offloading from the harvester to the trailer conveyor. Vegetation debris will be picked up by bucket, loaded in a dump truck and offloaded in a storage bin or on the ground. Material may remain onsite for later disposal or transported for immediate disposal by truck offsite.

Due to sediment in the lake, it is unknown at this time how close the cookie cutter will be able to access the shore or other shallow areas in the lake. The Aquamog system would be employed in these areas. The Aquamog system is a self propelled hydraulic barge with independently working paddle wheels. A flair chopper and/or rototiller are attached to a 15-18 foot articulated arm that can reach into shallow waters, not accessible by the cookie cutter. Emergent vegetation would be shred to water level and the rototiller attachment would be used to shred roots in the substrate. The action of the barge paddle wheels can be used to push water and move vegetation so the harvester can access it for removal. In shallow areas where the aquatic equipment is not able to operate, and for work within the box culvert and channel, work will be performed by contractors with construction equipment located in upland areas or by crews with hand equipment.

Construction Access: Vehicle access to the Andree Clark Bird Refuge is via the parking lot on the west side of Los Patos Way, off East Cabrillo Boulevard. Access for construction equipment will be from the parking lot to the adjacent "beach". For the Bird Refuge culvert, access will be from the gated park entry 150 feet west of the parking lot and west 1,425 feet along an unpaved park road to the culvert. Access for the other culvert will be from Old Coast Highway.

Approximately 185 truck loads, each transporting a 40 cubic yard bin, would be required for the project if the contractor were successful in removing a total of 0.93 acres of emergent vegetation. Due to unknown depths in the lake, it is uncertain whether the contractor will be able to complete removal of all acreage identified. It is assumed that Marborg, or another contractor, would use surface streets to transport shredded vegetation to the Marborg Trash and Recycle Center located at 725 Cacique Street. The Marborg facility is approximately 1.6 to 2.2 miles from the project area, depending on whether the Milpas or Calle Cesar Chavez route is taken from East Cabrillo Boulevard. The applicant will work with City staff to determine if surface streets or Highway 101 provide the best route for haul vehicles. Best Management Practices, such as tarping, will be used during hauling. If access to Highway 101 is required, ingress Southbound is at Exit 94B - Hot Springs Road / Cabrillo Blvd, right to Los Patos Way and the Bird Refuge parking lot. Egress is Los Patos way then left at Cabrillo to US Highway 101 northbound Cabrillo Blvd onramp.

Construction Staging/Storage: Materials and equipment required for vegetation removal will be stored at the Andree Clark Bird Refuge. Construction vehicles will be stored in the Bird Refuge parking lot off Los Patos Way. When not in use, aquatic construction vehicles will remain in the Bird Refuge lake. Material and shredded vegetation storage will occur in the upland adjacent to parking and/or along the north shore. Parking and storage are located to avoid native habitat within the Bird Refuge. The staging/storage area will include means to prevent any fuel and similar spills from draining into the Bird Refuge lake. Shredded vegetation offloaded from the aquatic harvester to the beach will be scooped up and placed in bins and stored onsite until removed by Marborg or, alternately, loaded into dump trucks and hauled away. Preliminary drying of the shredded vegetation may occur within the bare soil or chip covered areas of the Bird Refuge. These areas are devoid of vegetation and would be accessible to vehicles for storage and transportation offsite. Staging and potential storage areas are included in Exhibit E. The applicant will work with City staff and the contractor to determine the most cost effective and practical method to handle shredded vegetation storage and removal. Vegetation stored onsite to dry would be removed within two to three weeks of completion of the year one project.

Andree Clark Bird Refuge Parking Lot Closure and North Shore Limited Access: The public will not be allowed to park in the Bird Refuge parking lot for the preparation and duration of the vegetation removal. Equipment would be staged from the beach parking lot and equipment access and is expected to last about two to three weeks. The closure is planned for public safety and a warning sign would be posted in advance. Depending on environmental conditions and permit approval, the majority of construction should occur in January or early February 2012. Fifteen parking spaces from the lot would not be available although alternative parking is available along Los Patos Way and on East Cabrillo Boulevard, near the East Beach volleyball courts.

The northern shore and associated path will have limited access during construction. It is anticipated that the north shore would be closed daily during construction, but would likely be available outside of construction hours. Closure of the parking lot will not block access to the Bird Refuge and surrounding bike path as other points of access are available. Limited access would affect approximately 1,900 linear feet of northern shore and trail. Over 3,000 linear feet of access on the eastern and southern perimeter would be available. The western shore between the lake and the zoo does not contain public trails.

Project Operations:

Construction Workers: It is estimated that approximately six construction workers are expected to be onsite during aquatic vegetation removal, and an additional four are expected for a shorter duration at the Bird Refuge for culvert maintenance. That crew of four, or an additional crew of the same size, would be expected to work at the Old Coast Highway culvert. Based on the amount of time culverts would require, that would result in an average of eight crew members per week.

Schedule. Timing is crucial for the proposed vegetation removal. Work is proposed for winter months, optimally January to February 15, 2012, to meet the needs of aquatic construction equipment and to avoid sensitive biological resources in the Bird Refuge. The cookie cutter and harvester require a minimum of 20 to 30 inches of water in order to operate. Therefore, work is proposed to begin after winter rains have increased the depth of the relatively shallow Bird Refuge lake. Work will also need to avoid the bird nesting season (February 15 – August 15), for the protection of breeding birds and as a requirement of the federal Migratory Bird Treaty Act.

Vegetation maintenance in year one is estimated to occur over ten to fourteen working days. Follow up maintenance would occur annually over the next four years, as needed. The amount of time required for ongoing maintenance is likely to be substantially less than for initial vegetation removal. Habitat restoration would begin with the removal of non-native plant species in year one. Restoration plant installation, including watering and maintenance, would begin in the fall/winter of year two. Work within the sandstone box culvert (B1) and in the concrete-lined channel (B2) would occur during year one. Although that work is not dependent upon winter rains, it will likely be completed in tandem with the other year one Bird Refuge vegetation clearance.

Required Permits: The Bird Refuge lake is in permanent Coastal Commission jurisdiction and the culverts and upland portion of the Bird Refuge are in the appealable coastal jurisdiction. The project would require the following permits and discretionary actions:

1. A Coastal Development Permit from the City Planning Commission and a recommendation to the California Coastal Commission (CCC) for the portion of the project in the CCC's permanent jurisdiction.
2. A Coastal Development Permit from the California Coastal Commission for work in submerged lands.
3. Historic Landmarks Commission approval of a project in El Pueblo Viejo Landmark District.
4. A U.S Army Corps of Engineers Section 404 permit for work within waters of the U.S.
5. Regional Water Quality Control Board Section 401Water Quality Certification.
6. A Streambed Alteration Agreement with the California Department of Fish and Game for work within waters of the State.

Additionally, the Historic Landmarks Commission held a hearing on the project on August 17, 2011 for comments only and had no requirements. The Parks and Recreation Commission will discuss the project at its regular September 28, 2011 meeting, although it will not be subject to discretionary review. The City entered into informal consultation with the U.S. Fish and Wildlife Service regarding tidewater goby and the U.S. Army Corps of Engineers will enter into consultation with Fish and Wildlife regarding the goby. The consultation process with USFWS and CDFG will determine whether any incidental take permits are needed.

ENVIRONMENTAL SETTING

Existing Land Use

Existing Facilities and Uses. The Bird Refuge site is a 42 acre open space park containing a 29 acre lake and provides passive recreation opportunities such as bird watching, hiking and biking. No habitable structure or maintenance facilities are located on the property. In addition to funds from the Clark family, a Coastal Conservancy Grant in the late 1980s provided funds for park improvements. Improvements included the development of viewing platforms, onsite trails, parking, fencing, habitat restoration and landscaping. A grouted sandstone culvert is located on a 7.77 acre Parks Department parcel (Municipal Tennis Courts).

Access and Parking: The Bird Refuge parking area can be accessed from Los Patos Way, off East Cabrillo Boulevard, and contains 15 parking spaces, including one for accessible parking. The eastern and southern perimeter of the Bird Refuge includes a lawn that can be accessed from a Class I bike path around the lake. The sandstone culvert can be accessed via Old Coast Highway, north of the Bird Refuge and Highway 101.

Existing Site Characteristics

Topography: Level and generally less than eight feet above sea level.

Seismic/Geologic Conditions: According to City 2011 Master Environmental Assessment (MEA) maps, the area is not within a fault hazard zone; the liquefaction potential of estuarine deposits around the perimeter of the lake is high, the soil shrink swell potential of expansive soils is high; and the erosion potential ranges from moderate (lake and culverts) to very high (southern lawn area). The project area is primarily water but does contain Milpitas-Positas Fine Sandy Loam and orthent soils.

Flooding/Fire Hazard: The City 2011 MEA map illustrates a FEMA Flood Zone of X for the project area in the upland surrounding the lake and the sandstone culvert on Coast Village Road. FEMA Flood Zone X has a 0.2 percent annual chance of flood hazard, or a 500 year flood. The lake is in the AE FEMA Flood zone with a 1% annual chance of flood hazard or approximately the 100 year flood. . The project area is also inside the Tsunami Run-up Zone. It is not in a High Fire Hazard Area. City of Santa Barbara Fire Station 2 would respond to calls.

Creeks/Drainage: Historically, the Andree Clark Bird Refuge area was a salt marsh, receiving fresh water from Sycamore Creek. However, construction of the railroad in the 1880s resulted in rerouting Sycamore Creek, thereby isolating the salt marsh. The lake, now an artificially modified estuary, supports palustrine wetlands: a brackish marsh.

The 844-acre watershed is predominantly urban (large lot residential) but also contains a golf course, tennis courts, a portion of the Zoo, and a cemetery. Runoff from the watershed, including roadways (including U.S. Highway 101), enters the lake via a mix of open channels and storm drains. The lake is considered brackish because salinity is above 0.5 parts per thousand (ppt). The lake is connected to the Pacific Ocean through a tidegate system located adjacent to Cabrillo Boulevard and passing under that roadway. A closed weir gate in the outflow channel separates the lake from a coastal lagoon at the Pacific Ocean.

Biological Resources: Native marsh vegetation at the Bird Refuge includes plants in the bulrush series (*Scirpus californicus*; tules), cattail series (*Typha domingensis*) and bulrush-cattail series, as mapped by SAIC (2010) and, according to Sawyer and Keeler-Wolfe (1995). Five acres of these aquatic vegetation types occur around the wetted perimeter of the Bird Refuge. The Bird Refuge also includes native riparian and upland habitats, non-native habitat, bare areas (roads, paths) and open water, as seen in Exhibit B.

Tidewater goby (*Eucyclogobius newberryi*), a federally endangered and California Species of Concern, was discovered in the Bird Refuge lake in April 2011 during surveys in preparation for this project. Native southwestern pond turtle, a California Species of Concern, and three non-native species of turtles are known to exist within the Bird Refuge. Birds protected by the Migratory Treaty Act are present and breed within the Bird Refuge. A biological assessment (BA) for tidewater goby and a biological evaluation (BE) for species of concern, such as southwestern pond turtle, were prepared by ENTRIX in 2011 and are included as Exhibits F and G, respectively.

Archaeological Resources: The MEA map shows the Bird Refuge as being within a prehistoric water course buffer. The project is within El Pueblo Viejo Landmark District and is on the Potential Historic Resources list. The project lies on the outer edges of an archeological site documented at the Santa Barbara Zoo (SAIC 2003). The majority of the project area lies under the lake, however, where archaeological resources are less likely to occur

Noise: The MEA map illustrates noise contours of greater than 70 db, 65-70db, and 60-65db within the Bird Refuge as the site lies between the Union Pacific Railroad and Highway 101 to the north and East Cabrillo Blvd and the Pacific Ocean to the south.

PROPERTY CHARACTERISTICS

Assessor's Parcel Number:	017-382-001 (Bird Refuge)/ 017-3810001 (sandstone culvert)	**General Plan Designation:**	Park
Zoning:	PR/SD3 Park and Recreation, Coastal Overlay	**Parcel Size:**	42 acres/ 7.77 acres
Existing Land Use:	Open Space Park/Park	**Proposed Land Use:**	Open Space Park/Park
Slope:	Level		
SURROUNDING LAND USES:			
North:	Railroad and Highway 101		
South:	East Cabrillo Boulevard, Clark Estate		
East:	Los Patos Way, Commercial		
West:	Santa Barbara Zoo		

PLANS AND POLICY DISCUSSION

Land Use and Zoning Designations:

The Bird Refuge is located at the southeast border of the City, in the East Beach neighborhood. The Bird Refuge is considered a Special Use Facility and is located in an area of the City associated with other Special Use Facilities with Parks and Recreation Zoning, including the Santa Barbara Zoo and beach, as stated in the Land Use Element. Also to the southeast is the Clark Estate, which is zoned Planned Unit Development (PUD).

Land Use Compatibility:

The subject project, has a number of environmental impacts that are either less than significant as proposed or reduced to a less than significant level with mitigation measures. For the subject project, adverse impacts related to noise, traffic and solid waste disposal from vegetation removal were identified to occur during vegetation removal activities. However, based on the unique operations of the proposed use as described in the primary impact sections, the identified impacts do not raise any significant neighborhood compatibility issues. A full analysis of the required findings to approve the use and a discussion of neighborhood compatibility will be provided in the project staff report.

General Plan Policies:

The initial analysis indicates that the proposed project could be found consistent with the policies of the City's General Plan as discussed below.

1. Land Use

   The Land Use Element sets forth several Principles and Goals, including Principle 8, which states: "It is essential to protect the historic, architectural, and natural qualities of Santa Barbara's environment and to preserve the ecological balance of all life systems with which we coexist." This project will help return balance to the Bird Refuge by improving water flow and quality and reducing mosquitoes. It will also improve wildlife viewing by opening up blocked viewing platforms. Thus, the project is consistent with this principle.

2. Seismic Safety/Safety Element

   The City's Seismic Safety/Safety Element requires that development be sited, designed and maintained to protect life, property, and public well-being from seismic and other geologic hazards, and to reduce or avoid adverse economic, social, and environmental impacts caused by hazardous geologic conditions. The Seismic Safety/Safety Element addresses a number of potential hazards including, geology, seismicity, flooding, liquefaction, tsunamis, high groundwater, and erosion.

   The project site is subject to some seismic or geologic constraints. As discussed in the Initial Study analysis, potential impacts associated with these hazards would be less than significant as there are no habitable structures existing or proposed for the project area and the proposed work would not aggravate any known hazards.

3. Conservation Element

City Conservation Element policies provide that significant environmental resources of the City be preserved and protected. The Conservation Element requires implementation of resource protection measures for archaeological, cultural and historic resources; visual, biological and open space resources; specimen and street trees; air and water quality; and to minimize potential drainage, erosion and flooding hazards. The following policies directly apply to the proposed project:

Cultural and Historic Resources Policy 1.0 "Activities and development which could damage or destroy archaeological, historic, or architectural resources are to be avoided".

The potential for impact is low and is less than significant with the proposed measures. Therefore, project activities will not damage or destroy cultural resources and are consistent with the policy.

Biological Resources Policy 5.0 "The habitats of rare and endangered species shall be preserved."

The Bird Refuge provides habitat for endangered and rare species including tidewater goby, southwestern pond turtle and several bird species protected by the Migratory Bird Treaty Act. Adherence to the measures contained in the Biological Assessment and Biological Evaluation (Entrix 2011) and discussed in the Initial Study will avoid or mitigate impacts to the species.

Biological Resources Policy 10 "Programs shall be developed to maintain a productive urban biotic community."

The biological surveys, habitat mapping and associated reports prepared in association with the project provide valuable information for the Bird Refuge, including the discovery of tidewater goby, an endangered species. The submitted SAIC biological reports provide a biotic analysis of the Bird Refuge habitat and suitability for the species observed. The project provides a vegetation management plan for the Bird Refuge for the next five years, including maintenance and restoration plans. Therefore, the project can be found consistent with this policy.

Visual Resources Policy 5.0 "Significant open space areas should be protected to preserve the City's visual resources from degradation."

The maintenance work will help restore conveyance in the Bird Refuge and hydrologically connected culverts, thereby protecting the Bird Refuge, a scenic resource, from flooding and erosion. Viewing platforms onsite provide views across the Bird Refuge the other scenic resources such as the beach, Cabrillo Boulevard, Zoo and Clark Estate hillside. Therefore, the project can be found consistent with this policy.

4. Open Space Element

The Open Space Element is concerned primarily with conserving, providing, and improving, as appropriate, land and water areas significant in the Santa Barbara landscape. Those would be defined as the ocean, mountains, major hillsides, creeks, shoreline, major parks and the freeway. The project site is located within an area that is considered a major parks complex at the easterly entrance to the City. The project consists of maintenance and restoration of the Bird Refuge that would help reduce flooding and help control the mosquito population for the park and surrounding parks vicinity. Therefore, the project can be found potentially consistent with the Open Space Element.

5. Circulation Element

The Circulation Element of the General Plan contains goals and implementing measures to reduce adverse impacts to the City's street system and parking by reducing reliance on the automobile, encouraging alternative forms of transportation, reviewing traffic impact standards, and applying land use and planning strategies that support the City's mobility goals. As discussed in the Initial Study analysis, potential traffic and parking related impacts are less than significant, therefore the project could be found consistent with the policies of the Circulation Element.

6. Noise Element

The City's Noise Element includes policies intended to achieve and maintain a noise environment that is compatible with the variety of human activities and land uses in the City. The proposed project would not generate a substantial increase in long term existing ambient noise levels in the area due to the nature of the proposed project, vegetation maintenance and restoration. Short-term construction noise is anticipated but would

be temporary and minimized through implementation of the City's Noise Ordinance requirements and by use of neighborhood noticing. Therefore, the proposed project could be found potentially consistent with the Noise Element.

Local Coastal Plan (LCP) and Coastal Act Consistency:

Several Local Coastal Plan (LCP) policies deal specifically with the Andree Clark Bird Refuge.

Policy 6.12 "The Andree Clark Bird Refuge shall be maintained, enhanced, and restored to a healthy and viable aquatic habitat, and shall be preserved as open space or other public, non-developable area."

Vegetation removal restoring flow and conveyance in culverts and the Bird Refuge is also anticipated to help with eutrophication in the lake by providing increased water circulation. The work will also assist vector control with mosquito abatement. Therefore, the project is consistent with the LCP policy

Policy 6.13 "The primary use of the Andree Clark Bird Refuge shall be as a sanctuary for migratory waterfowl and that use shall be preserved, protected, maintained, and, where necessary, enhanced."

Vegetation removal between the western island and the shoreline will help project birds nesting on the island. In a pre-application site visit with jurisdictional agencies in the winter of 2011, the California Department of Fish and Game stated that the removal of tules between the island and Bird Refuge shore would serve to protect breeding birds on the western island by removing a potential passageway for feral animals. Also, as discussed in the Initial Study analysis, potential impacts associated with disturbance from vegetation would be adequately addressed by implementing avoidance measures, such as working outside of bird breeding season, pre-construction surveys and set-backs.

The proposed project is consistent with LCP Policies.

The California Coastal Act also includes several policies that relate to this project.

Marine Resources Policy 30230 calls for marine resources to "be maintained, enhanced, and, where feasible, restored." It also calls for special protection for areas and species of special biological significance. Policy 30231 requires protection against spillage of, among other things, petroleum products and hazardous substances and effective containment and cleanup facilities and procedures to handle accidental spills. Policy 30233 requires that work proposed in coastal streams and wetlands can only be allowed if it can be defined as a "restoration project". Additionally, the only projects allowed in coastal wetlands and streams are those that incorporate the least environmentally damaging design and mitigation feasibly available. This project is designed to improve the habitat of the lake by removing tules, cattails and bulrushes that, if allowed to proliferate, would result in a monoculture habitat with very little species diversity. This habitat would not support tidewater goby foraging, the southwestern pond turtle and many of the birds that currently breed there. As mitigated, the project will provide protection against discharge of hazardous materials, including accidental spills. Thus, the project is consistent with Coastal Act Marine Environment policies. The project will restore coastal wetland areas at a 1:1 ratio. Removal of vegetation by other means, such as hand removal or herbicide, was considered. Removal of aquatic vegetation, including rhizomes and roots, by hand would require long periods of time (months) in the Bird Refuge and would be challenging or next to impossible for a contractor to perform work under water and in deep detritus, as found in the lake. Such a long construction period could result in significant impacts on endangered and sensitive species in the Bird Refuge and disrupt migratory bird breeding. Removal of vegetation with aquatic construction was found to be the least environmentally damaging.

Coastal Act Land Resources policy 30240 requires environmentally sensitive habitat areas to be protected against significant disruption of habitat values. In addition, habitat lost will be mitigated by a 1:1 replacement/restoration within the Bird Refuge. Pursuant to 30240, the project's uses (recreation, open space, and vector control) are dependent on the environmentally sensitive habitat area. Policy 30244 requires mitigation of any impacts on archaeological resources. The project will help improve the brackish water habitat. Although the project is on the outer edge of an identified archaeological site, it is unlikely to impact the site. Monitoring will be required during any significant ground disturbance near the archaeological site. With these provisions, the project is consistent with the Coastal Act Land Resources policies.

Coastal Act Development policy 30251 provides for protection of the scenic and visual qualities of coastal areas. Reestablishment of views from the viewing platforms is consistent with this policy. Additionally, the changes made as a result of vegetation removal and restoration will have no adverse effects on views of the Bird Refuge. While the parking in the public parking lot at the Bird Refuge would be closed during construction, this closure would be temporary and not exceed a few weeks a year. Therefore, the project would be consistent with the public access and recreation policies of the Coastal Act.

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

A draft Mitigation Monitoring and Reporting Program has been prepared for the project in compliance with Public Resources Code §21081.6. The draft MMRP is attached here as Exhibit H.

ENVIRONMENTAL CHECKLIST

The following checklist contains questions concerning potential changes to the environment that may result if this project is implemented. If no impact would occur, **NO** should be checked. If the project might result in an impact, check **YES** indicating the potential level of significance as follows:

Significant: Known substantial environmental impacts. Further review needed to determine if there are feasible mitigation measures and/or alternatives to reduce the impact.

Potentially Significant: Unknown, potentially significant impacts that need further review to determine significance level and whether mitigable.

Potentially Significant, Mitigable: Potentially significant impacts that can be avoided or reduced to less than significant levels with identified mitigation measures agreed-to by the applicant.

Less Than Significant: Impacts that are not substantial or significant.

1. AESTHETICS Could the project:		**NO**	**YES** *Level of Significance*
a)	Have a substantial adverse effect on a scenic vista?		Less Than Significant
b)	Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings, within a state scenic highway?		Less Than Significant
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?		Less Than Significant
d)	Create a new source of substantial light or glare?	X	

Visual Aesthetics - Discussion

Issues: Issues associated with visual aesthetics include the potential blockage of important public scenic views, project on-site visual aesthetics and compatibility with the surrounding area, and changes in exterior lighting.

Impact Evaluation Guidelines: Aesthetic quality, whether a project is visually pleasing or unpleasing, may be perceived and valued differently from one person to the next, and depends in part on the context of the environment in which a project is proposed. The significance of visual changes is assessed qualitatively based on consideration of the proposed physical change and project design within the context of the surrounding visual setting. First, the existing visual setting is reviewed to determine whether important existing visual aesthetics are involved, based on consideration of existing views, existing visual aesthetics on and around the site, and existing lighting conditions. Under CEQA, the evaluation of a project's potential impacts to scenic views is focused on views from public (as opposed to private) viewpoints. The importance of existing views is assessed qualitatively based on whether important visual resources such as mountains, skyline trees, or the coastline, can be seen, the extent and scenic quality of the views, and whether the views are experienced from public viewpoints. The visual changes associated with the project are then assessed qualitatively to determine whether the project would result in substantial effects associated with important public scenic views, on-site visual aesthetics, and lighting.

Significant visual aesthetics impacts may potentially result from:

- Substantial obstruction or degradation of important public scenic views, extensive grading and/or removal of substantial amounts of vegetation and trees visible from public areas without adequate landscaping; or substantial loss of important public open space.

- Substantially damage scenic resources with a scenic highway (Highway 154; Highway 101; Cabrillo Blvd between Highway 101 and Castillo Street; Sycamore Canyon Road (144)/Stanwood Drive(192)/Mission Ridge Road (192)/Mountain Drive to the Old Mission on Los Olivos Street; or Shoreline Drive from Castillo Street to the end of Shoreline Park.)
- Substantial negative aesthetic effect or incompatibility with surrounding land uses or structures due to project size, massing, scale, density, architecture, signage, or other design features.
- Substantial light and/or glare that poses a hazard or substantial annoyance to adjacent land uses and sensitive receptors.

Visual Aesthetics – Existing Conditions and Project Impacts

1.a) and b) Scenic Views and Scenic Highways. The Bird Refuge is a scenic resource with views to and from scenic highways, including East Cabrillo Boulevard and Highway 101. The Bird Refuge provides a view of aquatic and terrestrial habitats and good opportunities for bird and other wildlife observation.

The majority of vegetation removal (0.56 acres) will occur between the western island and the northern shore. From East Cabrillo Blvd and East Beach, the majority of vegetation removal will be blocked from view by the western island. Less than 1/3 of an acre would be removed from the remainder of the 20+ acre Bird Refuge lake and culverts. The view from Highway 101 is fleeting and, if this low lying area is visible, it constitutes a fraction of the view in the 42 acre site. The change in view will be minimal to non-perceptible. Additionally, habitat restoration will replace an equivalent amount of emergent vegetation in the Bird Refuge. Therefore, there will be no damage to scenic resources or loss of open space and impacts to scenic resources would be less than significant.

1.b) Aesthetics. The project was presented to the Historic Landmarks Committee and was found consistent with their guidelines. Removal of vegetation will be compatible with surrounding land uses and will result in minimal aesthetics impacts. The construction period would temporarily affect the aesthetics of the area, but the impact would occur only a few weeks a year. Impacts to aesthetics would be less than significant.

1.c) Lighting. The proposed project does not include any artificial lighting. Removal of 0.86 acres of vegetation in the 29 acre lake will not result in substantial light and/or glare and impacts to lighting would be less than significant.

Visual Aesthetics - Mitigation

None necessary.

Visual Aesthetics - Residual Impacts

Less than significant.

2. AIR QUALITY Could the project:		**NO**	**YES** *Level of Significance*
a)	Conflict with or obstruct implementation of the applicable air quality plan?		Less than Significant
b)	Exceed any air quality emission threshold?		Less than Significant
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is designated in non-attainment under an applicable federal or state ambient air quality standard?		Less than Significant
d)	Expose sensitive receptors to substantial pollutants?		Less than Significant
e)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?		Less than Significant

f)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?		Less than Significant
g)	Create objectionable odors?		Less than Significant

Air Quality - Discussion

Issues. Air quality issues involve pollutant emissions from vehicle exhaust, stationary sources (i.e. gas stations, boilers, diesel generators, dry cleaners, oil and gas processing facilities, etc), and minor stationary sources called "area sources" (i.e. residential heating and cooling, fireplaces, etc.) that contribute to smog, particulates and nuisance dust associated with grading and construction processes, and nuisance odors. Stationary sources of air emissions are of particular concern to sensitive receptors, as is construction dust and particulate matter. Sensitive receptors are defined as children, elderly, or ill people that can be more adversely affected by air quality emissions. Land uses typically associated with sensitive receptors include schools, parks, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and clinics.

Smog, or ozone, is formed in the atmosphere through a series of photochemical reactions involving interaction of oxides of nitrogen [NOx] and reactive organic compounds [ROC] (referred to as ozone precursors) with sunlight over a period of several hours. Primary sources of ozone precursors in the South Coast area are vehicle emissions. Sources of particulate matter (PM_{10} and $PM_{2.5}$) include demolition, grading, road dust, agricultural tilling, mineral quarries, and vehicle exhaust.

The City of Santa Barbara is part of the South Coast Air Basin. The City is subject to the National Ambient Air Quality Standards and the California Ambient Air Quality Standards (CAAQS), which are more stringent than the national standards. The CAAQS apply to six pollutants: photochemical ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, particulate matter, and lead. The Santa Barbara County Air Pollution Control District (SBCAPCD) provides oversight on compliance with air quality standards and preparation of the County Clean Air Plan.

Santa Barbara County is considered in attainment of the federal eight-hour ozone standard, and in attainment of the state one-hour ozone standard. The County does not meet the state eight-hour ozone standard or the state standard for particulate matter less than ten microns in diameter (PM_{10}); but does meet the federal PM_{10} standard. The County is in attainment for the federal $PM_{2.5}$ standard and unclassified for the state $PM_{2.5}$ standard.

The APCD has also issued several notifications and requirements regarding toxic air emissions generated from activities such as gasoline dispensing, dry cleaning, freeways, manufacturing, etc., that may require projects with these components to mitigate or redesign features of the project to avoid excessive health risks. Additionally, APCD requires submittal of an asbestos notification form for each regulated structure that is proposed to be demolished or renovated.

Global Climate Change (GCC) is a change in the average weather of the earth that can be measured by changes in wind patterns, storms, precipitation and temperature. Although there is not unanimous agreement regarding the occurrence, causes, or effects of GCC, there is a substantial body of evidence that climate change is occurring due the introduction of gases that trap heat in the atmosphere. Common greenhouse gases (GHG) include water vapor, carbon dioxide, methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, ozone and aerosols. Natural processes emit GHG that help to regulate the earth's temperature; however, it is believed that substantial increases in emissions from human activities, such as electricity production and vehicle use, have substantially elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. While other greenhouse gases have higher global warming potential, carbon dioxide is emitted in such vastly higher quantities that it accounts for 85 percent (in terms of carbon dioxide equivalent) of all greenhouse gas emissions by the United States. Greenhouse gas emissions are typically measured in terms of mass carbon dioxide equivalents (CO_2e), which is the product of the mass of a particular greenhouse gas and its specific global warming potential (CO_2 has a global warming potential of 1).

California is a substantial contributor of GHG (2nd largest contributor in the U.S. and the 16th largest contributor in the world); with transportation and electricity generation representing the two largest contributing factors (41 and 22 percent, respectively). Assembly Bill 32 created the California Global Warming Solutions Act of 2006 that requires the California Air Resources Board to adopt regulations to evaluate statewide greenhouse gas emissions, and then create a program and emission caps to limit statewide emissions to 1990 levels. California State Senate Bill 97, enacted in 2007, required that the CEQA Guidelines be amended to include "guidance for the mitigation of greenhouse gas emission or the effects of greenhouse gas emissions." The California Office of Planning and Research developed amendments to the CEQA Guidelines which were adopted by the California Natural Resources Agency on December 30, 2009 and became effective March 18, 2010. These amendments established a general framework for addressing global climate change impacts in the

CEQA process. A number of state and regional agencies within California are working to develop procedures to evaluate climate change impacts in CEQA documents and to determine whether those impacts are significant. While these standards are being developed for Santa Barbara County, APCD recommends that CEQA documents include: 1) a discussion of a project's impacts to and from global climate change; 2) a quantification of greenhouse gas emissions from all project sources; and 3) a discussion of how climate change impacts have been be mitigated to the extent reasonably possible for each project.

Impact Evaluation Guidelines: A project may create a significant air quality impact from the following:

- Exceeding an APCD pollutant threshold; inconsistency with District regulations; or exceeding population forecasts in the adopted County Clean Air Plan.
- Exposing sensitive receptors, such as children, the elderly or sick people to substantial pollutant exposure.
- Substantial unmitigated nuisance dust during earthwork or construction operations.
- Creation of nuisance odors inconsistent with APCD regulations.

Long-Term (Operational) Impact Guidelines: The City of Santa Barbara uses the SBCAPCD thresholds of significance for evaluating air quality impacts. The APCD has determined that a proposed project will not have a significant air quality impact on the environment if operation of the project will:

- Emit (from all project sources, both stationary and mobile) less than 240 pounds per day for ROC and NO_x, and 80 pounds per day for PM_{10};
- Emit less than 25 pounds per day of ROC or NO_x from motor vehicle trips only;
- Not cause a violation of any California or National Ambient Air Quality Standard (except ozone);
- Not exceed the APCD health risks public notification thresholds adopted by the APCD Board; and
- Be consistent with the adopted federal and state air quality plans for Santa Barbara.

Substantial long-term project emissions could potentially stem from stationary sources which may require permits from the APCD and from motor vehicles associated with the project and from mobile sources. Examples of stationary emission sources that require permits from APCD include gas stations, auto body shops, diesel generators, boilers and large water heaters, dry cleaners, oil and gas production and processing facilities, and wastewater treatment facilities.

Short-Term (Construction) Impacts Guidelines: Projects involving grading, paving, construction, and landscaping activities may cause localized nuisance dust impacts and increased particulate matter (PM_{10}). Substantial dust-related impacts may be potentially significant, but are generally considered mitigable with the application of standard dust control mitigation measures. Standard dust mitigation measures are applied to projects with either significant or less than significant effects.

Exhaust from construction equipment also contributes to air pollution. Quantitative thresholds of significance are not currently in place for short-term or construction emissions. However, SBCAPCD uses combined emissions from all construction equipment that exceed 25 tons of any pollutant except carbon monoxide within a 12-month period as a guideline threshold for determining significance of construction emission impacts.

Cumulative Impacts and Consistency with Clean Air Plan: If the project-specific impact exceeds the ozone precursor significance threshold, it is also considered to have a considerable contribution to cumulative impacts. When a project is not accounted for in the most recent Clean Air Plan growth projections, then the project's impact may also be considered to have a considerable contribution to cumulative air quality impacts. The Santa Barbara County Association of Governments and Air Resources Board on-road emissions forecasts are used as a basis for vehicle emission forecasting. If a project provides for increased population growth beyond that forecasted in the most recently adopted CAP, or if the project does not incorporate appropriate air quality mitigation and control measures, or is inconsistent with APCD rules and regulations, then the project may be found inconsistent with the CAP and may have a significant impact on air quality.

Global Climate Change: According to recent amendments to Appendix G of the CEQA Guidelines, a project would have significant impacts related to greenhouse gas emission if it would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. A number of state and regional agencies within California are currently working to develop procedures to determine specifically how this significance determination should be interpreted and to develop plans and policies for the reduction of greenhouse gas emissions. In the meantime,

projects should be designed to reduce greenhouse gas emissions to the extent reasonably possible.

Additionally, as an interim measure, APCD and other local jurisdictions including Santa Barbara County are temporarily using greenhouse gas emissions thresholds adopted in June 2010 by the Bay Area Air Quality Management District (BAAQMD). The BAAQMD thresholds are the most recently-adopted thresholds currently in use in California. Appendix I contains a detailed explanation from the County of Santa Barbara as to why the BAAQMND analysis and thresholds are appropriate for land use project in Santa Barbara County. APCD staff have also indicated that given that the BAAQMD's adopted thresholds provide the most current significance criteria available at this time, they are appropriate as interim thresholds of significance for use by other jurisdictions until more specific local thresholds are developed. Consistent with the BAAQMD's guidance, the project's contribution to cumulative impacts to GHG emissions and climate change would be cumulatively considerable if the project would produce in excess of 1,100 metric tons CO_2E/year.

Air Quality – Existing Conditions and Project Impacts

2.a) Clean Air Plan

The proposed project consists primarily of vegetative maintenance that would occur a maximum of a few weeks a year. No housing units are proposed. Direct and indirect emissions associated with the project are accounted for in the 2010 Clean Air Plan emissions growth assumptions. Appropriate air quality mitigation measures, including construction dust suppression, would be applied to the project, consistent with CAP and City policies, and are identified herein as recommended mitigation measures. The project could be found consistent with the 2010 Clean Air Plan; therefore, impacts would be *less than significant*.

b-f) Air Pollutant Emissions, Sensitive Receptors, and Cumulative Impacts

Long-Term (Area Source & Operational) Emissions:

As proposed, the project area would continue as a public park. The project would not include any new stationary sources. Utilizing the CAPCD Screening Table contained in the APCD document entitled "Scope and Content of Air Quality Section in Environmental Documents,", the project is not proposing a type of development that would likely exceed the threshold of significance for ROC and NOx emissions of 240 pounds per day of ROC or NOx. Consistent with APCD guidance, this indicates that the project is also highly unlikely to exceed the APCD threshold of 80 pounds per day of PM10 as well. Therefore, the proposed project is anticipated to have a *less than significant* effect on long term air quality.

Short-Term (Construction) Emissions:

Construction of the proposed project could result in emissions of pollutants due to limited ground disturbance, fumes, and vehicle exhaust. There are no sensitive receptors located adjacent to the project site that could be affected by dust and particulates during vegetation removal and restoration and vehicle exhaust from construction equipment.

The project would involve limited ground disturbance related to vegetation removal and restoration planting which could cause localized dust related impacts resulting in increases in particulate matter (PM10 and PM2.5). APCD recommends standard dust control measures for any discretionary project involving earth-moving activities. Dust-related impacts to sensitive receptors would be *less than significant*, and would be further reduced with implementation of the recommended mitigation measures identified below.

Diesel and gasoline powered construction equipment also emit particulate matter, NOx, and ROC. While APCD only has thresholds related to construction of stationary sources, APCD recommends quantifying emissions from construction equipment if the project exceeds the APCD Screening Table for operations to see if emissions from all construction equipment would need to exceed 25 tons of any pollutant (except carbon monoxide) within a 12-month period. In this case, the project does not involve construction of a stationary source and does not exceed the APCD Screening Table for operations. Therefore, the proposed project is anticipated to have a *less than significant impact*. However, the SBCAPCD recommends measures for limiting vehicle exhaust, which are identified below as recommended mitigation measures.

Global Climate Change:

Sources of carbon dioxide emissions that could result from the project include construction-related truck traffic and equipment operation and removal of relatively small amounts of vegetation that could be sequestering carbon dioxide. The proposed project would result in minimal change to the long term emissions of carbon dioxide. Construction emissions would be limited to the construction period and would be reduced through construction equipment emission control measures required as standard conditions of approval and shown below as recommended mitigation measures. Further the

project does not exceed any other air quality standard for operations or construction. Finally, the project falls significantly below development levels outlined in the BAAQMD Screening Table for Greenhouse Gas Impacts that describes types of development unlikely to generate more than 1,100 metric tons CO_2E/year. This is BAAQMD's quantitative threshold for impacts related to GHG emissions that is being used by Santa Barbara County and other local jurisdictions as an interim threshold of significance until one is developed regionally or at the State level. The project would, therefore, not result in substantial greenhouse gas emissions or impede the ability of the State to attain greenhouse gas reduction goals and impacts would be considered *less than significant*.

2.g) Odors

The project is limited to park maintenance uses, and would not include land uses involving odors or smoke. The project would not contain features with the potential to emit substantial odorous emissions, from sources such as commercial cooking equipment, combustion or evaporation of fuels, sewer systems, or solvents and surface coatings.

Due to the nature of the proposed land use and limited size of the project, project impacts related to odors would be considered *less than significant*.

Air Quality – Recommended Mitigation

AQ-1 **Construction Dust Control – Tarping.** Trucks transporting fill material to and from the site shall be covered from the point of origin and maintain a freeboard height of 12 inches.

AQ-2 **Construction Dust Control – Gravel Pads.** Gravel pads shall be installed to reduce mud/dirt track out from unpaved truck exit routes, if needed.

AQ-3 **Construction Dust Control – Minimize Disturbed Area/Speed.** Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.

AQ-4 **Construction Dust Control – Disturbed Area Treatment.** After clearing, grading, earth moving, excavation, or demolition is completed, the entire area of disturbed soil shall be treated to prevent wind erosion. This may be accomplished by:

a. Seeding and watering until grass cover is grown;

b. Spreading soil binders;

c. Sufficiently wetting the area down to form a crust on the surface with repeated soakings as necessary to maintain the crust and prevent dust pickup by the wind;

d. Other methods approved in advance by the Air Pollution Control District.

AQ-5 **Stockpiling.** If importation, exportation and stockpiling of soils are involved, soil stockpiled for more than two days shall be covered, kept moist by applying water at a rate of 1.4 gallons per hour per square yard, or treated with soil binders to prevent dust generation. Apply cover when wind events are declared.

AQ-6 **Construction Dust Control – Project Environmental Coordinator (PEC).** The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when construction work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading for the structure.

AQ-7 **Engine Size.** The engine size of construction equipment shall be the minimum practical size.

AQ-8 **Equipment Numbers.** The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.

AQ-9 **Equipment Maintenance.** Construction equipment shall be maintained to meet the manufacturer's specifications.

AQ-10 **Catalytic Converters.** Catalytic converters shall be installed on gasoline-powered equipment, if feasible.

AQ-11 **Diesel Catalytic Converters.** Diesel catalytic converters, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California shall be installed, if available.

AQ-12 **Diesel Replacements.** Diesel powered equipment shall be replaced by electric equipment whenever feasible.

AQ-13 **Idling Limitation.** All commercial diesel vehicles are subject to Title 13, Section 2485 and 2449 of the California Code of Regulations, limiting engine idling times. Idling of heavy-duty diesel trucks and diesel fueled or

alternative diesel fueled off-road compression ignition vehicle during loading and unloading shall be limited to five minutes; auxiliary power units shall be used whenever possible.

AQ-14 Portable diesel equipment - All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program or shall obtain an APCD permit.

AQ-15 Mobile construction equipment - Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, Section 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emission from in-use (existing) off-road diesel-fueled vehicles. The current requirements include idling limits of 5 minutes, labeling of vehicles with ARB-issued equipment identification numbers, reporting to ARB, and vehicle sales disclosures For more information, please refer to the CARB website at www.arb.ca.gov/msprog/ordiesel/ordiesel.htm

Refer to the Traffic section for alternative transportation measures that would reduce automotive vehicle use and associated exhaust emissions. Refer to the Public Services and Utilities and Service Systems sections for a discussion of recycling and additional energy consumption measures that would minimize energy consumption and emissions.

Air Quality - Residual Impacts

Less than significant.

3. BIOLOGICAL RESOURCES Could the project result in impacts to:		NO	YES *Level of Significance*
a)	Endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?		Potentially Significant, Mitigable
b)	Locally designated historic, Landmark or specimen trees?	X	
c)	Natural communities (e.g. oak woodland, coastal habitat, etc.).		Potentially Significant, Mitigable
d)	Wetland habitat (e.g. marsh, riparian, and vernal pool)?		Potentially Significant, Mitigable
e)	Wildlife dispersal or migration corridors?		Potentially Significant, Mitigable

Biological Resources - Discussion

Issues: Biological resources issues involve the potential for a project to substantially affect biologically-important natural vegetation and wildlife, particularly species that are protected as rare, threatened, or endangered by federal or state wildlife agencies and their habitat, native specimen trees, and designated landmark or historic trees.

Impact Evaluation Guidelines: Existing native wildlife and vegetation on a project site are qualitatively assessed to identify whether they constitute important biological resources, based on the types, amounts, and quality of the resources within the context of the larger ecological community. If important biological resources exist, project effects to the resources are qualitatively evaluated to determine whether the project would substantially affect these important biological resources. Significant biological resource impacts may potentially result from substantial disturbance to important wildlife and vegetation in the following ways:

- Elimination or substantial reduction or disruption of important natural vegetative communities and wildlife habitat or migration corridors, such as oak woodland, coastal strand, riparian, and wetlands.
- Substantial effect on protected plant or animal species listed or otherwise identified or protected as endangered, threatened or rare.
- Substantial loss or damage to important native specimen trees or designated landmark or historic trees.

Biological Resources – Existing Conditions and Project Impacts

3.a,b,d,e) Native Wildlife and Habitat. Sensitive wildlife resources present onsite include: tidewater goby, federally endangered and a California Species of Concern; southwest pond turtle, California Species of Concern; and several birds protected under the Migratory Bird Treaty Act. Cardno ENTRIX, a biological consultant, prepared a biological assessment (BA) and biological evaluation (BE) to address the potential impacts of the project on these species and biological resources at the site. A BA is prepared for listed or proposed federal endangered or threatened species and/or critical habitat. A BE is prepared for state species of concern or other state or federal special-status species.

According to the Cardno ENTRIX BA, habitat for tidewater gobies in the Bird Refuge lake appears to be adequate enough to at least support foraging. Gobies are expected to be in the lake only occasionally, possibly entering from the lagoon during limited periods though the tidegate connection. Bottom sediments of the lake are primarily very silty/muddy, which are not suitable for breeding burrow construction, and it is unlikely that tidewater gobies are able to successfully breed in the lake. Thus, vegetation removal is not expected to interfere with goby breeding. The project would disturb approximately 20% of the marsh vegetation and less than 4% of the open water. Tidewater goby may use aquatic vegetation as refuge and could potentially be injured by vegetation cutting and removal, if present in the work locations. Vibration and noise underwater plus turbidity from the aquatic construction equipment would tend to disperse fish, including gobies, out of the work area. Because the tidewater goby population is likely to be small (due to no breeding in the lake, a short life span, and large population decline in winter), disturbances in a small portion of the habitat will have a low potential to affect any tidewater gobies. Wetland creation along the lakeside would cause a temporary disturbance to habitat that could be used by gobies. Any gobies in this area would likely move away during planting.

Work within the culverts could affect gobies, if present. Mitigation is included to reduce impacts to gobies, including measure for preconstruction surveys and goby relocation. According to the BA (Cardno ENTRIX 2011), the proposed project may affect, but is not likely to adversely affect tidewater goby. The BA uses terminology intended for federal review (NEPA) and, for CEQA, purposes, it could be stated that the project may result in impacts, some less than significant and, in others, significant but mitigable.

The BA also states the proposed project is not likely to adversely affect the southwestern pond turtle. Vegetation removal activities would remove dense coverage from unlikely habitat for this species and may potentially improve habitat conditions long-term. Most of the open water habitat and emergent vegetation present would remain undisturbed. Restoration in the upland areas around the margins of the lake would have minimal benefits to southwestern pond turtles because this species is not likely to be using the upland areas for breeding.

Birds protected by the Migratory Bird Treaty Act are known to breed onsite and the project could potentially impact breeding, but measures would be implemented to avoid project impacts on migratory bird nesting, including scheduling vegetation removal activities outside of the bird nesting season., Project impacts to endangered or special status species and their habitat would be significant but would be mitigable with implementation of the avoidance and protection measures and restoration as stated in the BA and BE and included here.

Sensitive habitats onsite include wetland marsh and riparian habitats and, to a lesser extent, native coastal sage scrub. The project will result in the removal of 0.86 acres of marsh vegetation from the lake. Habitat restoration is included as part of the project and will restore 0.86 acres of wetland habitat in the Bird Refuge, primarily marsh habitat, as illustrated in Exhibit J, Restoration Areas. Maintenance excavation in two culverts will remove marsh species, but no restoration is proposed as those areas were never intended to support marsh habitat because they are man-made storm flow conveyances. Should construction equipment be refueled near sensitive habitats or go out of designated access pathways, additional impacts to native habitats and wildlife could occur. Required mitigation measures to avoid impacts to habitats, water quality, and wildlife and mitigate vegetation removal impacts would make the potential impacts to biological habitats and wildlife onsite potentially significant, but mitigable.

3.c) Specimen Trees. Construction access and a minor portion of habitat restoration will occur in terrestrial habitat. No tree removal is proposed and existing sensitive habitats will be protected via a habitat protection plan as discussed above.

Biological Resources – Mitigation

Avoidance and preventative procedures include those prepared by the City and contract biological consultants. Implementation of these avoidance measures would minimize the potential for effect on this species.

Tidewater Goby Protection Measures.

BIO-1 A pre-maintenance survey of culverts shall be performed by a qualified biologist no more than seven days prior to maintenance initiation to verify that no gobies are present. If gobies are determined to be present

during the survey, a qualified biologist with applicable permits/approval will conduct tidewater goby rescue and relocation in order to clear the maintenance areas.

BIO-2 Complete all pre-construction and construction activities outside of the tidewater goby peak breeding season (April through June), to the extent feasible.

General Wildlife Avoidance and Protection Measures. The following general wildlife avoidance and protection measures will be used during project implementation, to the extent appropriate for the site.

BIO-3 Report all dead or injured listed or sensitive animals immediately.

BIO-4 Do not disturb, capture, handle, or move animals, or their nests. If any wildlife is encountered during the course of project activities, said wildlife shall be allowed to freely leave the area unharmed.

BIO-5 Institute a litter control program during the course of construction/maintenance activities. Covered trash receptacles shall be placed at each designated work site and the contents properly disposed of at the end of the day at a minimum and more often as necessary. No foodstuffs or associated trash, containers, etc. shall be left overnight.

BIO-6 Pets shall be prohibited on the job site.

BIO-7 Complete all work during daylight hours. Night-time work (and use of artificial lighting) shall not occur.

BIO-8 A biological monitor shall conduct environmental training for all workers.

Nesting Bird Protection Measures.

BIO-9 Equipment mobilization and vegetation cutting and removal shall be conducted outside the breeding season (February 15 through August 31, for all birds except raptors (which can nest as early as December 1).

BIO-10 If vegetation maintenance must occur during the nesting season (including raptors), a qualified biologist shall conduct nesting bird surveys prior to the work. If nesting is observed within or immediately adjacent to the work area, a buffer of at least 100 feet (500 feet for raptors) shall be established, marked, monitored, and maintained until the nest is abandoned or the young have fledged.

BIO-11 The consulting ornithologist recommends initial aquatic vegetation removal should be conducted in one year to reduce repeated impacts to nesting birds.

BIO-12 Equipment shall maintain speeds of less than 5 mph in the water.

BIO-13 Work shall be monitored by a qualified biologist who can flush birds away, salvage birds that could be harmed by the work, and check for new nesting activity as the work progresses.

Vegetation Avoidance and Protection. The City will implement the following measures.

BIO-14 Work crews will be restricted to designated and clearly defined work areas. Construction crews shall be educated regarding staying within work areas for the protections of sensitive wetland and native habitat onsite.

BIO-15 To prevent the introduction of new invasive animals and weedy plant species, the City shall require the designated contractor to ensure that work boots, vehicles, and equipment have been cleaned prior to starting work on the project.

BIO-16 Staging of equipment and temporary dump sites shall be restricted to designated areas. Any waste materials produced by removal activities will be temporarily stored away from the lake margin and will be removed for disposal in an approved disposal site.

BIO-17 All materials, wastes, and equipment will be removed from construction sites as soon as practical after use and at the completion of construction.

BIO-18 All power equipment and vehicles will be kept in good working order and inspected each day for leaks prior to use. Leaks will be repaired immediately or problem vehicles or equipment will be removed from the Project site. Equipment will be staged in containment or other suitable barriers overnight to prevent accidental leakage of fluids.

BIO-19 All power equipment will be staged over tarps, or in holding pens with walled sides, to catch any leakage of fuel, oils, and other liquid to prevent these materials from soaking into the soil, or being carried into the lake.

BIO-20 Refueling will only take place in a designated area away from the lake. Refueling of the cookie cutter and harvester, if not feasible to do on land, will be conducted so that no fuel is spilled into the water. No foreign materials, such as petroleum or other fuels, will be released into the lake. During refueling of equipment, a drip pan shall be used to ensure that no fuel spills onto the ground or in the lake.

BIO-21 Appropriate firefighting equipment (e.g., extinguishers, shovels) shall be available on site during all phases of the Project, and appropriate fire prevention measures shall be taken to help minimize the chance of human-caused wildfires.

BIO-22 Drip pans or absorbent pads will be used during vehicle and equipment fueling. Absorbent spill clean-up materials and spill kits will be available in fueling areas, and workers will be trained in their use. Fuels will be stored in containment basins.

BIO-23 Appropriate spill containment and clean-up materials will be available on site at all times. Any spills will be cleaned up immediately and will not be buried or washed with water.

BIO-24 Used clean-up materials, contaminated materials, and recovered spilled materials that are no longer suitable for clean-up will be stored and disposed of properly. Hazardous and nonhazardous material will be disposed of in the manner specified by the manufacturer.

BIO-25 Sand bags, straw bales, straw wattles, or other erosion control materials will be used during restoration to dissipate the energy of flowing water, reduce soil erosion, and prevent sediment or other materials from entering the lake.

BIO-26 Define and respect clear work area limits.

BIO-27 Cleared or trimmed vegetation and woody debris shall be disposed of in a legal manner.

BIO-28 Precautions shall be taken to avoid damage to non-target vegetation by people or equipment.

Biological Resources - Residual Impacts

Less than significant.

4. CULTURAL RESOURCES Could the project:		**NO**	**YES** *Level of Significance*
a)	Disturb archaeological resources?		Potentially Significant, Mitigable
b)	Affect a historic structure or site designated or eligible for designation as a National, State or City landmark?		Less than Significant
c)	Have the potential to cause a physical change which would affect ethnic cultural values or restrict religious uses in the project area?	X	

Cultural Resources – Discussion

The majority of the project area has a low potential to contain archaeological sites as it is on the outer edge of a known site and the majority of the project area is an inundated marsh or culvert. The project is in the low and medium archaeological sensitivity zones as defined in the Comprehensive Archaeological Resources Assessment, Santa Barbara Zoological Gardens (SAIC, July 2003).

Impact Evaluation Guidelines: Archaeological and historical impacts are evaluated qualitatively by archeologists and historians. First, existing conditions on a site are assessed to identify whether important or unique archaeological or historical resources exist, based on criteria specified in the State CEQA *Guidelines* and City Master Environmental Assessment *Guidelines for Archaeological Resources and Historical Structures and Sites*, summarized as follows:

- Contains information needed to answer important scientific research questions and there exists a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with an important prehistoric or historic event or person.

If important archaeological or historic resources exist on the site, project changes are evaluated to determine whether they would substantially affect these important resources.

Cultural Resources – Existing Conditions and Project Impacts

4.a) Archaeological Resources. The Santa Barbara Zoo and Bird Refuge have been evaluated as part of a Comprehensive Archaeological Resources Assessment (SAIC, July 2003) that was approved by the City's Historic Landmarks Commission. The project includes mechanized ground disturbance in the lake. According to Dr Michael Glassow, the City's Cultural Resources Advisor, this area is on the extreme margins of archaeological site CA-SBA-1776 and the prospect of buried archaeological deposits in this low-lying area are extremely small, given that relatively recent sediments have accumulated. Restoration activities would occur in the low and medium archaeological sensitivity zones as defined in the Comprehensive Archaeological Resources Assessment, Santa Barbara Zoological Gardens (SAIC, July 2003). The project is proposing that no mechanized equipment be used for restoration and no major upland grading is proposed. Dr. Glassow and the City's Environmental Analyst have reviewed the project and have determined that only monitoring during significant ground disturbing activities in the "medium sensitivity zone" is needed consistent with the guidance in the Comprehensive Archaeological Assessment. The applicant has proposed monitoring consistent with these recommendations. The removal of sediments in the culvert area would not impact archeological resources as this area is relatively recently manmade and sediments have accumulated at this location recently. With the inclusion of monitoring during upland ground disturbing activities, project impacts to archaeological resources would be less than significant.

4.b) Historic Resources. Although the project area is within El Pueblo Viejo Landmark District and is on the Potential Historic Resources list, the Bird Refuge does not contain any historical structures. . The vegetation maintenance project does not change the historic resource nature of the site. Therefore, project impacts to historical resources would be less than significant.

4. c) Ethnic/Religious Resources. There is no evidence that the site involves any ethnic or religious use or importance. The project would have no impact on historic, ethnic or religious resources.

Cultural Resources – Mitigation

CR-1 Discovery Procedures and Mitigation. Discovery measures specific to this project and per the City Master Environmental Assessment shall be implemented throughout upland vegetation removal and restoration:

A City-qualified archaeologist and City-qualified Chumash observer should be retained to monitor significant ground disturbing activities that occur during construction in portions of the project area designated as "Medium Sensitivity Zone" in the Comprehensive Archaeological Resources Assessment, Santa Barbara Zoological Gardens, prepared by SAIC in July 2003. If intact cultural materials are identified, construction shall be temporarily suspended until the extent of the find is determined and an appropriate treatment plan is proposed and approved by the City Environmental Analyst, following the procedures set forth in the City's Master Environmental Assessment Guidelines for Archaeological Resources and Historic Structures and Sites.

Prior to the start of work in all portions of the project area, restoration personnel shall be alerted to the possibility of uncovering unanticipated archaeological features or artifacts associated with past human occupation of the project area. In the unlikely event that potentially intact and significant cultural resources are discovered during any project work, the City Environmental Analyst and project's City-approved archaeologist should be notified and activity in the location of the discovery should be temporarily suspended until the project archaeologist can evaluate the potential significance of the find, pursuant to the City's MEA. If the discovery consists of potentially human remains, the Santa Barbara County Coroner and the California Native American Heritage Commission shall also be contacted. Work in the area shall only proceed after authorization is granted by the Environmental Analyst.

Residual Impacts

Less than significant.

5. GEOPHYSICAL CONDITIONS Could the project result in or expose people to:		*NO*	*YES* *Level of Significance*
a)	Seismicity: fault rupture?	X	
b)	Seismicity: ground shaking or liquefaction?		Less than Significant
c)	Seismicity: seiche or tsunami?		Less than Significant
d)	Landslides or mudslides?		Less than Significant
e)	Subsidence of the land?		Less than Significant
f)	Expansive soils?		Less than Significant
g)	Excessive grading or permanent changes in the topography?	X	

Geophysical Conditions - Discussion

Issues: Geophysical impacts involve geologic and soil conditions and their potential to create physical hazards affecting persons or property; or substantial changes to the physical condition of the site. Included are earthquake-related conditions such as fault rupture, ground shaking, liquefaction (a condition in which saturated soil looses shear strength during earthquake shaking); or seismic sea waves; unstable soil or slope conditions, such as landslides, subsidence, expansive or compressible/collapsible soils; or erosion; and extensive grading or topographic changes.

Impact Evaluation Guidelines: Potentially significant geophysical impacts may result from:

- Exposure to or creation of unstable earth conditions due to seismic conditions, such as earthquake faulting, ground shaking, liquefaction, or seismic waves.
- Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.
- Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.

Geophysical Conditions – Existing Conditions and Project Impacts

5.a-b-c) Seismic Hazards

Fault Rupture: The maintenance and restoration project would occur in a location where there are no known faults and associated ground rupture is not anticipated. Therefore, the project would not be subject to ground rupture and there would be no impacts due to fault rupture.

Ground Shaking and Liquefaction: According to the 2011 MEA, the liquefaction potential of estuarine deposits around the perimeter of the lake is high. The maintenance and restoration are in areas already exposed to liquefaction and the removal of less than an acre of vegetation in the 29 acre lake would not expose more people to a liquefaction risk. Therefore, impacts of liquefaction in the project area would be *less than significant*

Seiche or Tsunami: According to the 2011 MEA, the proposed project is within the tsunami run-up area. The General Plan Update Certified EIR states that "Modeling suggests that purely earthquake generated tsunamis could result in local run-up of up to seven feet in elevation ... " and goes on to say that landslide induced tsunamis could be even higher. The annual probability of such tsunami is not provided but is on the order of 100 or more years. The project area lake is generally eight feet in elevation or less. The maintenance and restoration areas are already exposed to tsunami or wave action (seiche) and the removal of less than an acre of vegetation in the 29 acre lake would not expose more people to the tsunami or seiche risk. Therefore, impacts of tsunami or seiche in the project area would be *less than significant.*

5.d--f) Geologic or Soil Instability

Landslides or subsidence: The 2011 MEA map shows that erosion and landslide potential ranges from moderate (lake and culverts) to very high (southern lawn area) at the Bird Refuge. Landslide potential near the lawn is likely associated with the adjacent Clark Estate slopes. Erosion is associated with the unconsolidated soils of the Bird Refuge. The majority of the soil disturbance from maintenance would occur beneath the lake waters and contained within the site due to the downstream closed weir. Although there is a moderate to high potential for landslide or erosion, no structures are proposed for the project and the work would not expose people to a greater risk of landslide or erosion. Therefore, impacts would be *less than significant.* Subsidence, or the sinking of the earth's surface, has the potential to result from liquefaction. As stated in the liquefaction discussion above, impacts would be less than significant.

Expansive Soils: The City's MEA identifies that the soil shrink swell potential of expansive soils is high in the Bird Refuge but no structures are proposed. Therefore, impacts would be less than significant.

5.g) Topography; Grading

Topographic Changes or Grading: No topographical changes or grading are proposed for the project. Therefore, no impacts due to topographic changes or grading would occur.

Geophysical Conditions - Mitigation

None necessary.

Geophysical Conditions – Residual Impacts

Less than significant.

6. HAZARDS Could the project involve:		NO	YES *Level of Significance*
a)	A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?		Less than Significant
b)	The creation of any health hazard or potential health hazards?		Less than Significant
c)	Exposure of people to existing sources of potential health hazards?		Less than Significant
d)	Increased fire hazard in areas with flammable brush, grass, or trees?		Less than Significant

Hazards - Discussion

Issues: Hazardous materials issues involve the potential for public health or safety impacts from exposure of persons or the environment to hazardous materials or risk of accidents involving combustible or toxic substances.

Impact Evaluation Guidelines: Significant impacts may result from the following:

- Siting of incompatible projects in close proximity to existing sources of safety risk, such as pipelines, industrial processes, railroads, airports, etc.
- Exposure of project occupants or construction workers to unremediated soil or groundwater contamination.
- Exposure of persons or the environment to hazardous substances due to improper use, storage, or disposal of hazardous materials.
- Siting of development in a high fire hazard areas or beyond adequate emergency response time, with inadequate access or water pressure, or otherwise in a manner that creates a fire hazard

Hazards – Existing Conditions and Project Impacts

6.a,b,c) Public Health and Safety

Hazardous Materials Exposure. The State Water Resources Control Board Geotracker website (http://geotracker.swrcb.ca.gov) does not report any actively leaking underground fuel tank, land disposal, military or other cleanup cases on the project site. Construction contractors and equipment will be subject to the City's Best Management Practices and measures in the Air Quality Section, including measures related to the use of fuels and petrochemicals onsite.

Project construction would involve the need for mechanized equipment requiring refueling. Best management practices have been proposed and required in BIO-17 through BIO-20 and BIO-22 through BIO-24 to avoid spills and provide preventative clean-up of the project area.

Copper has been detected in Bird Refuge sediment and one measurement had elevated levels, as reported in City 2008-2009 sediment testing (City 2010). Toxicity tests from each site had "nontoxic" results and, according to the analysis conducted by the City, the Bird Refuge is "unlikely to cause toxicity." Therefore, projects impacts on hazardous materials exposure would be *less than significant.*

Public Safety. As a park maintenance and restoration project the work will involve the removal or planting of vegetation and will not expose the public to new safety hazards.

6.d) Fire Hazard. The project is not within a High Fire Hazard Zone and would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. With the introduction of construction equipment, there is an increased potential for fire hazard in approximately 2.5 acres of vegetation on the northern shore. Fire Station 2, located at 819 Cacique St approximately 1.4 miles away, would respond to the Bird Refuge and response time would be less than five minutes. Additionally, best management practices during construction that are also required mitigation under BIO-21 prevent wildland fires that may result from construction equipment onsite. Therefore, project impacts due to fire hazard are *less than significant.*

Hazards – Mitigation

Measures that are included in Biological Resources will help protect the project site from hazards, including BIO-17 through BIO-24

Hazards – Residual Impacts

Less than significant.

7. NOISE Could the project result in:		NO	YES *Level of Significance*
a)	Increases in existing noise levels?		Less than Significant
b)	Exposure of people to severe noise levels?		Potentially Significant, Mitigable

Noise - Discussion

Issues: Noise issues are associated with siting of a new noise-sensitive land use in an area subject to high ambient background noise levels, siting of a noise-generating land use next to existing noise-sensitive land uses, and/or short-term construction-related noise.

The primary source of ambient noise in the City is vehicle traffic noise. The City Master Environmental Assessment (MEA) *Noise Contour Map* identifies average ambient noise levels within the City.

Ambient noise levels are determined as averaged 24-hour weighted levels, using the Day-Night Noise Level (L_{dn}) or Community Noise Equivalence Level (CNEL) measurement scales. The L_{dn} averages the varying sound levels occurring over the 24-hour day and gives a 10 decibel penalty to noises occurring between the hours of 10:00 p.m. and 7:00 a.m. to take into account the greater annoyance of intrusive noise levels during nighttime hours. Since L_{dn} is a 24-hour average noise level, an area could have sporadic loud noise levels above 60 dB(A) which average out over the 24-hour period.

CNEL is similar to L_{dn} but includes a separate 5 dB(A) penalty for noise occurring between the hours of 7:00 p.m. and 10:00 p.m. CNEL and L_{dn} values usually agree with one another within 1 dB(A). The Equivalent Noise Level (L_{eq}) is a single noise level, which, if held constant during the measurement time period, would represent the same total energy as a fluctuating noise. L_{eq} values are commonly expressed for periods of one hour, but longer or shorter time periods may be specified. In general, a change in noise level of less than three decibels is not audible. A doubling of the distance from a noise source will generally equate to a change in decibel level of six decibels.

Guidance for appropriate long-term background noise levels for various land uses are established in the City General Plan Noise Element Land Use Compatibility Guidelines. Building codes also establish maximum average ambient noise levels for the interiors of structures.

High construction noise levels occur with the use of heavy equipment such as scrapers, rollers, graders, trenchers and large trucks for demolition, grading, and construction. Equipment noise levels can vary substantially through a construction period, and depend on the type of equipment, number of pieces operating, and equipment maintenance. Construction equipment generates noise levels of more than 80 or 90 dB(A) at a distance of 50 feet, and the shorter impulsive noises from other construction equipment (such as pile drivers and drills) can be even higher, up to and exceeding 100 dB(A). Noise during construction is generally intermittent and sporadic, and after completion of the initial demolition, grading and site preparation activities, tends to be quieter.

The Noise Ordinance (Chapter 9.16 of the Santa Barbara Municipal Code) governs short-term or periodic noise, such as construction noise, operation of motorized equipment or amplified sound, or other sources of nuisance noise. The ordinance establishes limitations on hours of construction and motorized equipment operations, and provides criteria for defining nuisance noise in general.

Impact Evaluation Guidelines: A significant noise impact may result from:

- Siting of a project such that persons would be subject to long-term ambient noise levels in excess of the following:
    - Commercial (retail, restaurant, etc.): Normally acceptable maximum exterior ambient noise level of 75 dB(A); maximum interior noise level of 50 dB(A).
    - Residential: Normally acceptable maximum exterior ambient noise level of 70 dB(A); maximum interior noise level of 45 dB(A).

Substantial noise from grading and construction activity in close proximity to noise-sensitive receptors for an extensive duration.

Noise – Existing Conditions and Project Impacts7.a-b) Increased Noise Level; Exposure to High Noise Levels Long-Term Operational Noise: Periodic vegetation removal and maintenance would occur after year one of the five year maintenance period. The project may generate temporary noise primarily during working hours. Sensitive receptors in the vicinity are subject to existing ambient noise levels in the project area that are high and are estimated to be 70 dB(A) according to the MEA. These existing noise levels are primarily due to the project location adjacent to the Union Pacific railroad, Highway 101, East Cabrillo Boulevard and the beach. The project would not result in increased exposure of people to these existing noise levels over the long term due to the vegetation maintenance or restoration activities. Therefore, long term operational noise impacts associated with the project impacts would be *less than significant.*

Temporary Construction Noise: Construction of the proposed project would generate high noise levels on and adjacent to the project during a two week period in year one. Vegetation removal equipment operation would potentially disturb nearby restaurants, other commercial uses and residences to the east of the project site along Los Patos Way and at the Clark Estate. As previously stated, ambient noise levels are high in the vicinity. Construction noise would be short term (two weeks) and the level of adverse effect could be mitigated through neighbor notification, limiting hours of construction and equipment BMPs. With implementation of short term related noise mitigations listed below, project impacts world be *potentially significant but mitigable*

Noise - Mitigation

N-1 **Neighborhood Notification Prior to Construction.** At least twenty (20) days prior to commencement of construction, the contractor shall provide written notice to all property owners, businesses, and residents within 300 feet of the project area. The notice shall contain a description of the project, the construction schedule, including days and hours of construction, the name and phone number of the (Project Environmental Coordinator (PEC) and) Contractor(s), site rules and Conditions of Approval pertaining to construction

activities, and any additional information that will assist the Building Inspectors, Police Officers and the public in addressing problems that may arise during construction.

N-2: **Construction Hours.** Construction (including preparation for construction work) shall only be permitted Monday through Friday between the hours of 7:00 a.m. and 5:00 p.m., excluding the following holidays: New Year's Day (January 1st); Martin Luther King Jr.'s Birthday (3rd Monday in January); President's Day (3rd Monday in February); Memorial Day (Last Monday in May); Independence Day (July 4th); Labor Day (1st Monday in September); Thanksgiving Day (4th Thursday in November); Day Following Thanksgiving Day (Friday following Thanksgiving); Christmas Day (December 25th). *When a holiday falls on a Saturday or Sunday, the preceding Friday or following Monday respectively shall be observed as a legal holiday.

When, based on required construction type or other appropriate reasons, it is necessary to do work outside the allowed construction hours, contractor shall contact the Chief of Building and Safety to request a waiver from the above construction hours, using the procedure outlined in Santa Barbara Municipal Code §9.16.015 Construction Work at Night. Contractor shall notify all residents within 300 feet of the parcel of intent to carry out said construction a minimum of 48 hours prior to said construction. Said notification shall include what the work includes, the reason for the work, the duration of the proposed work and a contact number.

N-3: **Construction Equipment Sound Control.** All construction equipment, including trucks, shall be professionally maintained and fitted with standard manufacturers' muffler and silencing devices.

Noise – Residual Impact

Less than significant.

8. POPULATION AND HOUSING Could the project:		**NO**	**YES** **Level of Significance**
a)	Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)?	X	
b)	Displace existing housing, especially affordable housing?	X	

Population and Housing - Discussion

Impact Evaluation Guidelines: Issues of potentially significant population and housing impacts may involve:

- Growth inducement, such as provision of substantial population or employment growth or creation of substantial housing demand; development in an undeveloped area, or extension/ expansion of major infrastructure that could support additional future growth.
- Loss of a substantial number of housing units, especially loss of more affordable housing.

Population and Housing – Existing Conditions and Project Impacts

8.a) Growth-Inducing Impacts. There would be no growth-inducing impacts because the project site is in an urbanized area that is currently served by all required infrastructure. The project would not involve any increase in major public facilities such as extension of water or sewer lines or roads that would facilitate other growth in the area. The project would not involve employment growth that would increase population or housing demand. . *No impact* would result from the project.

8.b) Housing Displacement. The project would not involve any housing displacement. *No impact* would result from the project.

Population and Housing - Mitigation

No mitigation is required.

Population and Housing – Residual Impact

Less than significant.

9. PUBLIC SERVICES Could the project have an effect upon, or result in a need for new or altered services in any of the following areas:		NO	YES *Level of Significance*
a)	Fire protection?	X	
b)	Police protection?	X	
c)	Schools?	X	
d)	Maintenance of public facilities, including roads?	X	
e)	Other governmental services?	X	
f)	Electrical power or natural gas?	X	
g)	Water treatment or distribution facilities?		Less than Significant
h)	Sewer or septic tanks?		Less than Significant
i)	Water distribution/demand?		Less than Significant
j)	Solid waste disposal?		Potentially Significant, Mitigable

Public Services - Discussion

Issues: This section evaluates project effects on fire and police protection services, schools, road maintenance and other governmental services, utilities, including electric and natural gas, water and sewer service, and solid waste disposal.

Impact Evaluation Guidelines: The following may be identified as significant public services and facilities impacts:

- Creation of a substantial need for increased police department, fire department, road maintenance, or government services staff or equipment.
- Generation of substantial numbers of students exceeding public school capacity where schools have been designated as overcrowded.
- Inadequate water, sewage disposal, or utility facilities.
- Substantial increase in solid waste disposal to area sanitary landfills.

Facilities and Services: In 2010, the City certified a Final Environmental Impact Report (FEIR) on the Plan Santa Barbara General Plan Update. The FEIR concluded that under existing conditions as well as the projected planned development and all studied alternatives, all public services (police, fire, library, public facilities, governmental facilities, electrical power, natural gas and communications) could accommodate the potential additional growth. The FEIR also determined that growth in the City under the General Plan would not result in a considerable contribution to cumulative impacts on public services on the South Coast.

Schools: None of the school districts in the South Coast have been designated "overcrowded" as defined by California State law. Per California Government Code Section 66000, the City collects development impact fees from new development to offset the cost of providing school services/additional infrastructure to accommodate new students generated by the development.

Water: The City of Santa Barbara's water supply comes primarily from the following sources, with the actual share of each determined by availability and level of customer demand: Lake Cachuma and Tecolote Tunnel; Gibraltar Reservoir, Devils Canyon and Mission Tunnel; groundwater; State Water Project Table A allotment; desalination; and recycled water. Conservation and efficiency improvements are projected to contribute to the supply by offsetting demand that would otherwise have to be supplied by additional sources. On June 14, 2011, based on the comprehensive review of the City's water supply, the City Council approved the Long Term Water Supply Program (LTWSP) for the planning period 2011-2030. The LTWSP outlines a strategy to use the above sources to meet the City's estimated system demand (potable plus recycled water) of 14,000 AFY, plus a 10% safety margin equal to 1,400 AFY, for a total water supply target of 15,400 AFY. The LTWSP concludes that the City's water supply is adequate to serve the anticipated demand plus safety margin during the planning period.

Solid Waste: Most of the waste generated in the City is transported on a daily basis to seven landfills located around the County. The County of Santa Barbara, which operates the landfills, has developed impact significance thresholds related to the impacts of development on remaining landfill capacity. These thresholds are utilized by the City to analyze solid waste impacts. The County thresholds are based on the projected average solid waste generation for Santa Barbara County from 1990-2005. The County assumes a 1.2% annual increase (approximately 4000 tons per year) in solid waste generation over the 15-year period. The County's threshold for project specific impacts to the solid waste system is 196 tons per year (this figure represents 5% of the expected average annual increase in solid waste generation [4000 tons/year]) for project operations. Source reduction, recycling, and composting can reduce a project's waste stream by as much as 50%. If a proposed project generates 196 or more tons per year after reduction and recycling efforts, impacts would be considered significant and unavoidable. Proposed projects with a project specific operational impact as identified above (196 tons/year or more) would also be considered cumulatively significant, as the project specific threshold of significance is based on a cumulative growth scenario. However, as landfill space is already extremely limited, any increase in solid waste of 1% or more of the expected average annual increase in solid waste generation [4000 tons/year], which equates to 40 tons per year, is considered an adverse cumulative impact.

The County of Santa Barbara adopted revised solid waste generation thresholds and guidelines in October 2008. According to the County's thresholds of significance, any construction, demolition or remodeling project of a commercial, industrial or residential development that is projected to create more than 350 tons of construction and demolition debris is considered to have a significant impact on solid waste generation. The County's 350 ton threshold has not been formally adopted by the City; however, it provides a useful method for calculating and analyzing construction waste generated by a project.

Public Services – Existing Conditions and Project Impacts

9a-b,d-i. Facilities and Services

The proposed project involves short-term vegetation removal in year one and intermittent work in years two through five. Vegetation removal and conveyance would not involve any short or long-term increase to fire or police protection, other governmental services or staff, schools, electric power or natural gas, water treatment, or wastewater. New native vegetation installed in terrestrial habitat may require periodic water for the first few years but would not be enough to increase the need for new water services. Therefore, impacts on utilities and service systems would be *less than significant.*

Sewer and water lines are located underground and elevated manholes are located in the project area. These utilities could be disrupted by construction equipment during project implementation. At the request of the City Engineering Division, a map locating utilities (Exhibit K) has been prepared and would be provided to contractors or staff working in the project areas. City conditions to the contractor would be included for the identification and protection of those onsite utilities that may be affected by construction equipment and an education requirement regarding avoidance measures prior to working in the area. With the implementation of these conditions, impacts to water and sewer lines would be *less than significant.*

9.c) Schools. The project would not result in new students or overcrowding in existing schools. There are no impacts to schools.

9.j) Solid Waste Generation/ Disposal. The project would not result in long term operational changes to solid waste generation at the Bird Refuge site. However, the project would involve construction debris. Vegetation maintenance would result in solid waste from shredded marsh vegetation. There are several challenges with the disposal of marsh vegetation including recycling, weight, salt content, water and cost. Per a conversation with the waste disposal company, the marsh vegetation would not be considered green waste, but would be recycled instead of diverted to a landfill.

An exact weight is not known, but if mulch weighs 200 to 500 pounds per cubic yard (cy), then a full 40 cy bin would weigh 4 to 10 tons. The waste disposal company states a 40 cy bin is rated to hold up to 10 tons of material and could be retrieved and transported with waste disposal vehicles. The project is estimated to result in 185 bins (40 cy each) of material, and that would result in 740 to 1,850 tons of solid waste being exported from the site for the year one work. Weight would be on the higher end for wetter material.

City Transportation Division staff and the construction equipment contractor suggest allowing vegetation to sit at the site to drain at the site before hauling. This would reduce the weight and possibly volume of material to be hauled, reduce the number of trips, and reduce the cost of disposal. This would result in significant weight reductions. The project would generate less than 350 tons of marsh material for disposal as the marsh material would be recycled and not be disposed of in a landfill. Mitigation Measure PS-1 below would ensure the material is recycled. The project would, therefore, have *significant but mitigable impacts* on solid waste.

Public Services - Mitigation

PS-1 A source reduction/recycling plan shall be developed for the proposed project and submitted for review and approval by the City's Environmental Analyst prior to building permit issuance. This plan shall include provisions for recycling of all marsh materials that meet the waste disposal facilities standards.

Public Services – Residual Impacts

Less than significant.

10. RECREATION Could the project:		**NO**	**YES** ***Level of Significance***
a)	Increase the demand for neighborhood or regional parks or other recreational facilities?		Less than Significant
b)	Affect existing parks or other public recreational facilities?		Less than Significant

Recreation - Discussion

Issues: Recreational issues are associated with increased demand for recreational facilities, or loss or impacts to existing recreational facilities.

Impact Evaluation Guidelines: Recreation impacts may be significant if they result in:

- Substantial increase in demand for park and recreation facilities in an area under-served by existing public park and recreation facilities.
- Substantial loss or interference with existing park space or other public recreational facilities such as hiking, cycling, or horse trails.

Recreation – Existing Conditions and Project Impacts

10.a) Recreational Demand. Vegetation maintenance in the park would not result in an increased demand for neighborhood or recreational parks or recreational facilities. The area is well served by existing public parks including the Bird Refuge, Santa Barbara Zoo and East Beach. However, part of the Bird Refuge would be unavailable for public use during vegetation removal and restoration. This would only last for a short time during the winter when usage of the Bird Refuge is low. Therefore, impacts to recreation demand would be *less than significant.*

10.b) Existing Recreational Facilities. The vegetation maintenance will reduce flooding and assist vector control in mosquito abatement. This will protect the Bird Refuge from flooding and park users from mosquitoes. Therefore, the project will result in a beneficial effect to the Bird Refuge and surrounding recreational facilities. While the parking and some of the trails on the north side of the lake would need to be closed during construction, this would be only a few weeks a year. Therefore, impacts to recreational facilities would be *less than significant.*

Recreation - Mitigation

None necessary.

Recreation – Residual Impacts

Less than significant.

11. TRANSPORTATION/CIRCULATION Could the project result in:		NO	YES *Level of Significance*
a)	Increased vehicle trips?		Less than Significant
b)	Hazards to safety from design features (e.g. sharp curves, inadequate sight distance or dangerous intersections)?		Less than Significant
c)	Inadequate emergency access or access to nearby uses?	X	
d)	Decreased performance or safety of pedestrian, bicycle, or public transit facilities?		Less Than Significant
e)	Conflicts with adopted policies, plans, programs, or ordinances regarding congestion management and the circulation system, taking into account all modes of transportation.		Less than Significant

Transportation - Discussion

Issues: Transportation issues include traffic, access, circulation and safety. Vehicle, bicycle and pedestrian, and transit modes of transportation are all considered, as well as emergency vehicle access. The City General Plan Circulation Element contains policies addressing circulation, traffic, and parking in the City.

Impact Evaluation Guidelines: A proposed project may have a significant impact on traffic/ circulation/ parking if it would:

Vehicle Traffic

- Cause an increase in traffic that is substantial in relation to the existing traffic load and street system capacity (see traffic thresholds below).
- Cause insufficiency in the transit system.
- Conflict with the Congestion Management Plan (CMP) or Circulation Element or other adopted plan or policy pertaining to vehicle or transit systems.

Circulation and Traffic Safety

- Create potential hazards due to addition of traffic to a roadway that has design features (e.g., narrow width, roadside ditches, sharp curves, poor sight distance, inadequate pavement structure) or that supports uses that would be incompatible with substantial increases in traffic.
- Diminish or reduce safe pedestrian, bicycle, or public transit circulation.
- Result in inadequate emergency access on-site or to nearby uses.
- Conflict with regional and local plans, policies, or ordinances regarding the circulation system, including all modes of transportation (vehicle, pedestrian, bicycle, and public transportation).

Traffic Thresholds of Significance: The City uses Levels of Service (LOS) "A" through "F" to describe operating conditions at signalized intersections in terms of volume-to-capacity (V/C) ratios, with LOS A (0.50-0.60 V/C) representing free flowing conditions and LOS F (0.90+ V/C) describing conditions of substantial delay. The City General Plan Circulation Element establishes the goal for City intersections to not exceed LOS C (0.70-0.80 V/C).

For purposes of environmental assessment, LOS C at 0.77 V/C is the threshold Level of Service against which impacts are measured. An intersection is considered "impacted" if the volume to capacity ratio is .77 V/C or greater.

Project-Specific Significant Impact: A project-specific significant impact results when:

(a) Project peak-hour traffic would cause a signalized intersection to exceed 0.77 V/C, or

(b) The V/C of an intersection already exceeding 0.77 V/C would be increased by 0.01 (1%) or more as a result of project peak-hour traffic.

For non-signalized intersections, delay-time methodology is utilized in evaluating impacts.

Significant Cumulative Contribution: A project would result in a significant contribution to cumulative traffic impacts when:

(a) Project peak-hour traffic together with other cumulative traffic from existing and reasonably foreseeable pending projects would cause an intersection to exceed 0.77 V/C, or

(b) Project would contribute traffic to an intersection already exceeding 0.77 V/C.

Transportation – Existing Conditions and Project Impacts

11.a) Traffic

Long-Term Traffic. The vegetation maintenance project would result in an additional 25 to 30 trips each year during years two and three and an additional 20 trips in years four and five, for follow up vegetation removal and restoration after the year one work is completed

According to Transportation Department staff, none of the intersections in the Cabrillo corridor within the project area have Levels of Service exceeding .77 volume to capacity (V/C) ratio during peak hours of the weekday morning and evening commutes (7-9 a.m. and 4-6 p.m.).The signaled intersection at Cabrillo and Niños Drive operates at LOS A (0.50-0.60 V/C). Other signaled intersections to the west, the route for City staff to debris disposal or City yard sites, are all LOS A. The intersection at Cabrillo and Highway 101 operates at LOS C in the morning and LOS B in the afternoon. The project would generate net traffic increase of less than one average daily trips (ADT) and less than one peak-hour trips (PRT). When distributed to the surrounding street system, long term impacts and cumulative impacts would be *less than significant.*

Short-Term Construction Traffic

The overall project construction process is estimated to last approximately 0.5 months. This would include vegetation removal, hauling and site preparation. The project would involve eight workers for two weeks, and maintenance excavation of the culverts would require up to four workers on site for one week. Working hours during the construction process are proposed to be 7a.m. - 5p.m. weekdays excluding holidays. Staging, equipment, materials storage, and temporary construction worker parking would occur onsite.

The project would generate 0.5-months of construction-related traffic, including up to 375 haul trips (there and back to drop off refuse) during winter months. Per Transportation Department staff, this time period is out of the "summer peak season" period for traffic. Additionally, Transportation staff did not anticipate significant impacts due to the temporary nature of the construction and given the existing LOS A for the of the haul route. Although not required, mitigation is included to reduce impacts to the Cabrillo/Highway 101 intersection during peak hours. Therefore, for the duration of the construction process, short-term construction-related traffic impacts would be *less than significant*. Standard mitigation measures would be applied as appropriate, including restrictions on the hours permitted for construction trips and approval of routes for construction traffic.

11.b,c) Access/ Circulation/ Safety Hazards

Los Patos Way is a two-lane arterial roadway that is fully improved along the project frontage. The project does not propose any changes to the existing roadway alignment, lane configurations or medians. The property frontage currently has a curb cut along Los Patos Way at the north of the property and a curb along East Cabrillo Boulevard at the east and south. Access to the public is provided by a circular driveway from Los Patos Way. The driveway has been designed to provide adequate sight distance to and from the intersection of the driveway with Los Patos Way. In addition, the project site is located in an urbanized area and there are no incompatible uses that would result in a vehicle mix that could increase traffic hazards. Therefore, proposed project impacts associated with vehicular access, circulation and evacuation related to the new driveway location and access to and from the new residence would be *less than significant* because it has been reviewed and found adequate by the City's Public Works, Engineering and Transportation Divisions, and Fire Department. Those City departments would additionally include conditions of approval, including restrictions related to parking on City streets or public right of way and conditions related to repair of same post construction, if damaged.

11.d) Bicycle/Pedestrian/Public Transit

Transit stops exist at the corner of East Cabrillo Boulevard and Los Patos Way. These transit stops are anticipated to provide adequate transit resources for the project demands. Metropolitan Transit District Lines, 14 and 20 serve the area with frequent headways. The border of the project area along East Cabrillo Boulevard has a dedicated bike lane. There is an existing parkway along the project frontage that will remain to serve the area's pedestrian needs. Project impacts associated with pedestrian, bicycle or public transit facilities would be *less than significant* because the vegetation

maintenance would not result in a substantial increase in the need for new transit facilities, bike lanes or sidewalks in the area. Pedestrians and bicyclists would continue to share the existing right-of-way.

11.e) Congestion Management

The project site would have direct access from a public street and would not conflict with or impede implementation of any policies, plans, programs, or ordinances regarding congestion management and the circulation system, taking into account all modes of transportation. Therefore, there would be *no impact* to congestion management or the circulation system.

Transportation – Recommended Mitigation

T-1 **Construction Traffic.** The haul routes for all construction related trucks, three tons or more, entering or exiting the site, shall be approved by the Transportation Engineer. Construction-related truck trips shall not be scheduled during peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) to help reduce truck traffic and noise on adjacent streets and roadways. The route of construction-related traffic shall be established to minimize trips through surrounding residential neighborhoods.

Transportation – Residual Impact

Less than significant.

12. WATER ENVIRONMENT Could the project result in:		**NO**	**YES** *Level of Significance*
a)	Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?		Less than Significant
b)	Exposure of people or property to water related hazards such as flooding?		Beneficial
c)	Discharge into surface waters?		Potentially Significant, Mitigable
d)	Change in the quantity, quality, direction or rate of flow of ground waters?	X	
e)	Increased storm water drainage?		Less Than Significant

Water – Discussion

Issues: Water resources issues include changes in offsite drainage and infiltration/groundwater recharge; storm water runoff and flooding; and water quality.

Impact Evaluation Guidelines: A significant impact would result from:

Water Resources and Drainage

- Substantially changing the amount of surface water in any water body or the quantity of groundwater recharge.
- Substantially changing the drainage pattern or creating a substantially increased amount or rate of surface water runoff that would exceed the capacity of existing or planned drainage and storm water systems.

Flooding

- Locating development within 100-year flood hazard areas; substantially altering the course or flow of flood waters or otherwise exposing people or property to substantial flood hazard

Water Quality

- Substantial discharge of sediment or pollutants into surface water or groundwater, or otherwise degrading water quality, including temperature, dissolved oxygen, or turbidity.

Water Resources – Existing Conditions and Project Impacts

12.a,d,e) Drainage. The amount of water entering the project from the surrounding watershed would not change with the removal of vegetation onsite. Stormwater currently enters the Bird Refuge via culvert and would continue to do so. The removal of vegetation within the Bird Refuge will restore the previous pattern of flow and will not substantially increase the rate of surface water runoff. Therefore, effects to drainage would be less than significant.

12.b) Flooding. The project area is located within the 100-year flood hazard area. The project will help prevent flooding onsite and in the vicinity by increasing the storm flow conveyance of culverts. Therefore, the project will have a beneficial effect with respect to flooding.

12.c, d) Water Quality. Vegetation removal equipment will remove roots and stir up sediment in the process, creating turbidity. Work will be during a two week period, then estimated to be a few days each year, for the five year maintenance period. Turbidity and sediments will be contained within the Bird Refuge as the weir downstream is closed. Work within culverts will include the use of BMPs downstream, such as straw waddles or bales.

The Bird Refuge lake is eutrophic and has been for years. It has been subject to algal blooms, both freshwater and marine, fish die-offs and odors. Penfield and Smith, Inc. was contracted in the mid-1980s to look at the conditions and provide suggestions to remedy the eutrophication. Some of the remedies were pursued, such as diversion of Zoo effluent and reduction of bird waste through public education (no feeding). Other remedies were costly or had other problems and have not been pursued, such as excavation and soil removal to deepen the refuge. Signs of eutrophication are currently indicated by dissolved oxygen (DO) results from tests performed by City staff at the Bird Refuge. Restoring storm flow conveyance of culverts and areas in the lake are anticipated to help with water circulation and DO in at least portions of the Bird Refuge, which should help eutrophication.

Bird Refuge sediment sampling was performed by City staff periodically 2008-2009. One pyrethroid level was elevated, although it was noted that there is no guideline for predicting toxicity and criteria only exists for freshwater sites and the Bird Refuge is brackish. According to the analysis conducted by the City, toxicity tests from each site had "nontoxic" results and the Bird Refuge is "unlikely to cause toxicity (City 2010)." With the implementation of these, BIO-18 through BIO-20 and BIO-22 through BIO-24, and the project measures required by the City Public Works Department, impacts to water quality will be *less than significant*

Water Resources - Mitigation

Measures that are included in Biological Resources will help protect water resources, including BIO-18 through BIO-20 and BIO-22 through BIO-24.

W-1 **Drainage and Water Quality.** Project plans for grading, drainage, stormwater facilities, and project development shall be subject to review and approval by City Building Division and Public Works Department per City regulations, (*and Regional Water Quality Control Board*). Sufficient engineered design and adequate mitigation measures shall be employed to ensure that no significant construction-related or long-term effects from increased runoff, erosion and sedimentation, urban water quality pollutants, or groundwater pollutants would result from the project.

W-2 Sand bags, straw bales, straw wattles, or other erosion control materials will be used during restoration to dissipate the energy of flowing water, reduce soil erosion, and prevent sediment or other materials from entering the lake.

Water Resources – Residual Impact

Less than significant.

13. LAND USE AND PLANNING		**YES**	**NO**
	Would the project:		
a)	Physically divide an established community?		X
b)	Conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?		X

Land Use and Planning – Discussion

13.a) The project will not create any long term physical barriers that will divide the community.

13.b) While completing each section of this Initial Study, an analysis was undertaken of the potential conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purposes of avoiding or mitigating an environmental effect (a complete list of said plans, policies, and regulation is available at the City Planning Division). Based on this analysis, it was determined that the project would be consistent with mitigation with all applicable policies as discussed in the Plans and Policies Section and the specific resource sections of this document.

Land Use and Planning – Required Mitigation

*See previous resource sections.

Land Use and Planning – Recommended Mitigation

*See previous resource sections.

Land Use and Planning – Residual Impacts

Less than significant.

MANDATORY FINDINGS OF SIGNIFICANCE.		*YES*	*NO*
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildfire population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X
b)	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?		X
c)	Does the project have potential impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X
d)	Does the project have potential environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		X

a) As discussed in Section 3 (Biological Resources), with the implementation of required mitigation to protect tidewater gobies, southwestern pond turtles, breeding birds and native plant communities, the project would not reduce the habitat of a fish or wildlife species, cause a fish or wildfire population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. As discussed in Section 4 (Cultural Resources), the project would not eliminate or impact important prehistoric or historic resources.

b) As discussed in Sections 1 through 12 of this Initial Study, the project, as mitigated, would not result in significant short- or long-term environmental impacts after mitigation.

c) Sections 1 through 12 of this Initial Study consider potential cumulative impacts to environmental resources. As discussed in these sections, the project, as mitigated, would not result in any significant, cumulative impacts on the environment because the project contribution to cumulative impacts would not be considerable after implementation of mitigation.

d) As discussed in Sections 1 through 12 of this Initial Study, no significant effects on humans (direct or indirect) would occur as a result of this project as mitigated. All potentially significant impacts related to… can be mitigated to a less than significant level. In addition, mitigation measures are recommended to further reduce adverse but less than significant impacts associated with ….

INITIAL STUDY CONCLUSION

On the basis of this initial evaluation it has been determined that with identified mitigation measures agreed-to by the applicant, potentially significant impacts would be avoided or reduced to less than significant levels. A Mitigated Negative Declaration will be prepared.

Initial Study Preparer — Date 8/29/11

Environmental Analyst — Date 8/29/11

EXHIBITS:

- **A. U.S.G.S. topographic map of the project vicinity**
- **B. Andree Clark Bird Refuge project area map**
- **C. Old Coast Highway project area and expanded view of the Bird Refuge culvert**
- **D. Photographs of Aquatic Equipment**
- **E. Equipment staging and storage area locations**

F. **Biological Assessment, prepared by Cardno ENTRIX July 2011**
G. **Biological Evaluation, prepared by Cardno EXTRIX July 2011**
H. **Mitigation Monitoring and Reporting Program**
I. **Interim GHG Emissions – Evidentiary Support**
J. **Restoration Areas**
K. **Andree Clark Bird Refuge Utilities Map**

LIST OF SOURCES USED IN PREPARATION OF THIS INITIAL STUDY

The following sources used in the preparation of this Initial Study are located at the Community Development Department, Planning Division, 630 Garden Street, Santa Barbara and are available for review upon request.

California Environmental Quality Act (CEQA) & CEQA Guidelines

Cardno ENTRIX 2011. Andree Clark Bird Refuge Biological Assessment

Cardno ENTRIX 2011. Andree Clark Bird Refuge Biological Evaluation

City of Santa Barbara. 2010. Water Quality Research and Monitoring Program Fiscal Year 2010

General Plan Circulation Element

General Plan Conservation Element

2004 Housing Element

General Plan Land Use Element

General Plan Noise Element w/appendices

General Plan Map

General Plan Seismic Safety/Safety Element

Geology Assessment for the City of Santa Barbara

Institute of Traffic Engineers Parking Generation Manual

Institute of Traffic Engineers Trip Generation Manual

Local Coastal Plan

Master Environmental Assessment

Master Environmental Assessment Maps (2008)

Parking Design Standards

Santa Barbara County Planning & Development Department 2010. **Interim GHG Emissions – Evidentiary Support** June 10. http://www.santabarbaraca.gov/NR/rdonlyres/BDF084C0-5DCC-48F8-8D02-B0559DDB2DCF/0/FY10WQAnnualReport12210.pdf

Santa Barbara Municipal Code & City Charter

Sawyer, J. O. and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society. Sacramento, CA.

SAIC 2003. Comprehensive Archaeological Resources Assessment, Santa Barbara Zoological Gardens, Santa Barbara, CA.

SAIC 2010. Vegetation Mapping Report Andree Clark Bird Refuge, prepared for the Parks and Recreation Department, City of Santa Barbara, CA.

Special District Map

Uniform Building Code as adopted by City

Zoning Ordinance & Zoning Map